



**ASSESSING ORGANIZATION CULTURE READINESS FOR KNOWLEDGE  
MANAGEMENT IMPLEMENTATION: THE CASE OF AERONAUTICAL  
SYSTEMS CENTER DIRECTORATE OF CONTRACTING**

THESIS

Martin R. Trent, Civilian

AFIT/GAQ/ENV/03-08

**DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY**

**AIR FORCE INSTITUTE OF TECHNOLOGY**

**Wright-Patterson Air Force Base, Ohio**

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THESIS

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Martin R. Trent, BS

Civilian

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Martin R. Trent, BS  
Civilian

Approved:

//signed//  
Summer E. Bartczak, Lt Col, USAF (Chairman)

06 Mar 03  
Date

//signed//  
Bradley Ayres., Lt Col, USAF (Member)

06 Mar 03  
Date

//signed//  
Diane F. Baker (Member)

07 Mar 03  
Date

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### **Abstract**

The DoD is currently pursuing a wholesale transformation that impacts all facets of DoD operations and responsibilities. At the same time, the commercial sector has been experiencing significant changes that drive them to look for new ways of remaining competitive and profitable. Leveraging knowledge (intellectual capital) to increase efficiency and effectiveness within the organization has become a popular management technique that has been successful in many commercial firms. The DoD has noted the commercial sector successes and initiatives to better manage knowledge are being developed and implemented on an enterprise-wide basis as well as on a local-organizational basis. Previous research suggests that an organization's readiness for change is a critical factor in whether or not implementation of knowledge management projects is successful. The previous research also suggests that readiness for change is determined by change content, process, context, and individual variables.

This thesis focuses on measuring readiness for change within the Contracting Directorate at Aeronautical Systems Center (ASC/PK) located at Wright-Patterson AFB, Ohio and whether or not there are any demographic correlations to readiness for change within the organization. ASC/PK's readiness for change was measured using a cross-sectional survey methodology and the results suggest that the ASC/PK population is generally ready for change in regard to knowledge management initiatives; however, several areas have been highlighted for improvement to increase overall readiness. Furthermore, the results of the study do not suggest any demographic correlations.

# **ASSESSING ORGANIZATION CULTURE READINESS FOR KNOWLEDGE MANAGEMENT IMPLEMENTATION: THE CASE OF AERONAUTICAL SYSTEMS CENTER DIRECTORATE OF CONTRACTING**

## **I. Introduction**

### **Background**

The DoD is currently pursuing a wholesale transformation that impacts all facets of DoD operations and responsibilities. The Executive Summary of the transformation study prepared for the Secretary of Defense and dated April 27, 2002 states, “To transform our military capabilities we need to transform the way we prepare forces, including the requirements, acquisition, infrastructure, training, and personnel (including leader development) processes.” As part of the DoD, the United States Air Force (USAF) supports this transformation imperative. The Air Force Posture Statement 2002 states, “Now, more than ever, our military must transform to preserve the asymmetric advantages it currently enjoys – specifically, its air and space capabilities.” For USAF procurement, the transformation initiative will involve examination and alignment of policy, processes, people, and technology (Wells, 2002).

At the same time, the commercial sector is also experiencing drastic changes resulting from the increased pace of evolutionary and revolutionary change; a more knowledge intensive nature to goods and services (e.g., increased tailoring of products and services based on knowledge of customer needs and desires); rapid globalization of the marketplace; shifts in the size and attrition rates of employee bases; organizational structure changes that matrix people by market versus geography; and the increasing

capabilities and decreasing costs of IT (Ruggles, 1997). These changes have driven commercial firms to pursue a transformation of their own to increase efficiency and effectiveness in order to remain competitive. To this end, many business practitioners and academicians are identifying and exploring new business management techniques, many of which focus on knowledge. Knowledge has always been critical to success, but it did not need the explicit management that it does now (Ruggles, 1997:2). Some firms are experiencing successes in managing knowledge and this in-turn is encouraging other organizations to focus on managing knowledge (Ruggles, 1997:8).

A management technique that has received a great deal of attention at this time is intellectual capital management (ICM). Several authors have published books conceptualizing intellectual capital with suggestions on how it can be leveraged and managed to create value (Stewart, 1997; Stewart, 2001; Edvinsson & Malone, 1997; Sveiby, 1997). ICM focuses on leveraging the non-physical assets of a business that add value and are a source of competitive advantage. Intellectual capital is the knowledge (expertise) that develops around and is applicable to a task, person, or organization plus the tools that augment this knowledge or deliver the knowledge to others when they need them (Stewart, 1997).

Part and parcel with ICM is knowledge management (KM), which “is an approach to adding or creating value by more actively leveraging the know-how, experience, and judgment resident within and, in many cases, outside of an organization.” (Ruggles, 1998:80) As is discussed in the next chapter of this paper, research suggests that many commercial firms have successfully improved efficiency (reduced cost) and

increased effectiveness by implementing prudent ICM and KM initiatives within their organizations.

Historically, the DoD has adopted successful commercial-sector initiatives to improve efficiency and effectiveness. Total Quality Management (TQM) and the current Federal Acquisition Regulation (FAR) Part 12 commercial acquisition techniques are examples of DoD implementing commercial-sector initiatives to drive improvements. In this tradition and as part of the transformation initiative, the DoD has already begun to implement some KM projects to improve efficiency and effectiveness. For the USAF specifically, the office of the Chief Information Officer (CIO) is currently working on developing and implementing an enterprise level KM strategy. This strategy focuses on establishing an infrastructure (establishing leadership and implementation teams and deploying software that serves as a “portal” for knowledge sharing throughout the USAF) (Nguyen, 2002). Another USAF initiative currently being developed is Aeronautical Enterprise Knowledge Management (AEKM), which focuses on multi-discipline collaboration (“What is AEKM?” 2002). In addition to these enterprise level projects, there are a variety of organizational level projects. For example, the Contracting Directorate at Aeronautical Systems Center (ASC/PK) currently posts lessons learned for various acquisition topics, maintains some limited electronic documentation archives, and maintains a directory of topic experts within their committee and policy division.

Such projects represent changes to the status quo and, as such, are often subject to implementation barriers that require prudent change management. One of these barriers can be the organization’s readiness for change. As is further discussed in Chapter II, the organization’s readiness for change is a critical antecedent for successful ICM/KM

project implementation. Consequently, when an organization contemplates implementing projects, it must take into account the organization's readiness for change or risk failure.

## **Research Questions**

Does the culture within ASC/PK currently exhibit a level of readiness for change to facilitate successful implementation of ICM/KM projects? And as a secondary question, is there a correlation between specific demographic characteristics and readiness for change within ASC/PK?

## **The Study**

In order to investigate the research questions stated above, a survey of ASC/PK personnel was conducted. The data that was gathered from this survey was analyzed to determine ASC/PK's readiness for change and any correlations between readiness for change and specific demographic groups within ASC/PK. The results of this analysis can then be used by ASC/PK in their future planning to determine what, if any, measures should be taken to change the culture within ASC/PK to better support ICM/KM.

## **Thesis Overview**

Chapter I furnishes subject matter background, the research question, and a brief description of the study. Chapter II provides a literature review that summarizes what scholars and researchers have published on the topic (relevant to this research). This literature review addresses a general discussion of ICM and KM, their benefits, various

categories of projects that are being successfully implemented in the commercial sector, and the concept of readiness for change. Chapter III presents the research methodology used in this study and identifies strengths and weaknesses of the methods used. Chapter IV sets forth a detailed analysis of the collected data and the findings that resulted from this analysis. Finally, Chapter V provides conclusions and recommendations.

## **II. Literature Review**

A review of the existing literature revealed numerous research efforts and published articles relative to ICM, KM, and change management. This chapter focuses on reviewing existing literature on these topics. Areas covered include: knowledge and intellectual capital management, organizational benefits of KM, the role of information technology, project focus areas, change management, and the *knowledge gap* addressed by this study.

### **Knowledge And Intellectual Capital Management**

Knowledge and intellectual capital is now being considered part of a firm's total value along with the traditional categories of physical capital (plant, equipment, and inventory) and financial capital (cash, receivables, and investments) (Lynn, 1998:11). This has given rise to a new field of management known as intellectual capital management (ICM). Stewart (1997) has popularized a taxonomy (originally developed by Hubert Saint-Onge of the Canadian Imperial Bank of Commerce and Leif Edvinsson of Skandia) whereby intellectual capital is categorized into three groups: human capital, customer (relational) capital, and structural capital. Human capital is the knowledge, skills, and competencies of organizational members. Customer (relational) capital is supplier relationships, satisfied customers, and other external intangible value-adding assets. Structural capital is systems, processes, culture, and intellectual property (Lynn, 1998:11). The American Society for Training & Development (ASTD) through their Effective Knowledge Management Working Group identified a fourth category that it called innovation capital. Innovation capital is the capability to innovate and create new

products and/or services (Van Buren, 1999:73). Structural capital resides within the organization while the other categories of intellectual capital are transient; therefore, the goal of ICM is to transform the transient forms of intellectual capital into structural capital (Lynn, 1998: 11). In other words, the goal is to capture and maintain all intellectual capital that is valuable to the firm, so that it is useable throughout the firm and does not disappear through the shortcomings of human memory or turnover of personnel.

Another management technique that is popular in the current business literature is knowledge management (KM). Monsanto has characterized KM as connecting people with other knowledgeable people, connecting people with info, enabling conversion of info to knowledge, encapsulating knowledge for ease of transfer, and distributing knowledge around the organization (Junnarkar, 1997:35). In Chapter I, intellectual capital was defined as knowledge and the tools to augment knowledge, so how is KM different from ICM? Some authors treat the terms as interchangeable (Duffy, 2001; Masoulas, 2000; and Stewart, 2001). IBM treats the terms interchangeably as evidenced by their naming the formal, enterprise-wide knowledge management program as “Intellectual Capital Management” (Huang, 1998: 570)

Other authors have made distinctions between the two terms. For instance, Lynn (1998) asserts that data given structure are information; information purposefully used and/or consumed becomes knowledge; and knowledge transformed into something of value to the organization becomes intellectual capital. In other words, knowledge is a resource that becomes part of intellectual capital. She uses this distinction from an accounting point of view to distinguish intellectual assets (knowledge assets) such as

patents as being debits and intellectual capital, the total organizational wealth invested in the intellectual assets, as being credits (Lynn, 1998:11). The ASTD Effective Knowledge Management Working Group characterizes KM as the processes and enablers within ICM (Van Buren, 1999: 73).

A recent study of 40 companies (USA, Japan, and Europe) suggests that many executives believe KM only entails implementation and use of complex information technology (IT) systems (Hauschild et al, 2001:74). This IT mentality can be seen in such large, global firms as NCR where the KM is managed through the IT organization and has a predominantly IT focus (Ferguson, 2002). ICM and its taxonomy highlights the non-IT aspects of KM to make it a more holistic approach. For instance, the categorization of customer (relational) capital acknowledges the open systems theory of knowledge (knowledge is constantly being exchanged outside the organization) expounded by authors such as Nonaka & Takeuchi (1995). ICM also highlights knowledge as an asset of the business that should be considered part of its balance sheet. Bernadette Lynn has characterized ICM as the value-driven transformation of human and relational capital into the structural capital of the organization (Lynn, 1998) and, in this researcher's opinion, this equates to knowledge management (taking individual knowledge and knowledge from outside the organization and capturing it as an organizational asset that can be accessed and shared).

For purposes of this research study, there is no need to make semantic distinctions between ICM and KM. Consequently, for the balance of this thesis, the term *KM* will be used in referring to the management techniques discussed above.

## **Organizational Benefits of KM**

KM projects are not a bromide for an organization's ills, but just one of many components of effective management (Davenport et al, 1997). With this being said, there is evidence that effective KM is beneficial to organizations in cost and time savings as well as developing internal capabilities to become more competitive. An IBM case study suggests that KM leads to improvements in efficiency (get knowledge/expertise faster), customer satisfaction (right solution more quickly), wiser use of resources (no re-invention of the wheel), and generation of new business (KM gives new solutions) (Huang, 1998). A recent McKinsey survey compared 15 companies that were considered successful at KM with 15 companies that were not. The successful KM companies cut throughput time for order generation and fulfillment by an average of 11% and cut development time by an average of 4.6% from 1995 to 1998 (Hauschild et al, 2001:76).

## **Information Technology's Role In KM**

IT is very important as a facilitator for sharing knowledge quickly (Huang, 1998:582 and Junnarkar, 1997:37); however, it should not be viewed as the only KM tool. Although information technology solutions are often the first thing that comes to mind when thinking about KM, many authors have pointed out that organizations must look beyond IT because capturing and sharing tacit knowledge (stories, gossip, observation, etc.) is where much of the leverage can be gained (Hauschild et al, 2001; Pfeffer & Sutton, 1999; Huang, 1998; and "Prescription for Knowledge Management", 1997).

## **KM Project Focus Areas**

Based on a recent study of 31 KM projects in 23 firms, Davenport and his colleagues at Ernst & Young have identified the following KM project focus areas that result in increased efficiency and effectiveness within organizations:

- 1) Create Knowledge Repositories
- 2) Improve Knowledge Access
- 3) Enhance the Cultural Support for Knowledge Use Within the Organization
- 4) Manage Knowledge as an Asset (Davenport et al, 1997).

### Knowledge Repositories

Knowledge repositories are places where knowledge can be stored for access by many within the organization. A good example of a knowledge repository is a digital library. Digital libraries are used to archive information in document form, provide a dynamic database/warehouse of corporate knowledge, map human knowledge within organization, and capture knowledge in high bandwidth multimedia (video) (Row, 1997:1-2). NCR currently uses a digital library that electronically stores documents. They are in the process of transitioning to an XML format versus a document format for stored information to facilitate management of “smaller pieces” of knowledge rather than the current management at a document level (Ferguson, 2002).

The World Bank conducts video interviews with their employees who are on the verge of retirement and combines this video record with hyperlinks to important documents and reports so that their knowledge can be preserved and shared within the organization (Lesser & Prusak, 2001: 102). Other companies such as Monsanto have

implemented extensive data warehouses with full-text search engines as well as “yellow page” listings of expertise within their organizations (Junnarkar, 1997: 37-38). There are several software applications (e.g. Cerebyte Inc.’s Infinos ) that are designed to extract and capture employee know-how to populate knowledge repositories. (Duffy, 2001:59).

### Improve Knowledge Access

To leverage knowledge, the knowledge has to be accessible to the right people at the right time. A number of different types of KM projects have been implemented to address accessibility. Electronic communities have been established to allow networked groups to engage in many-to-many knowledge sharing interactions (Williams & Cothrel, 2000). Monsanto uses internet/intranet and collaborative workgroup software as well as people networks (communities of practice) (Junnarkar, 1997: 37-38). A “Virtual Teamwork” system was developed and fielded by British Petroleum (BP) to facilitate collaboration across geography and their organizational structure. This concept involved providing their various sites video conferencing equipment, multimedia e-mail, application sharing, shared chalkboards, tools to record video clips, groupware, web browsers, ISDN lines, and document scanners. Although very IT intensive, the system was aimed at behavior and work patterns versus IT. By using this system, the crew on a drilling ship was able to collaborate real-time with experts many miles away to fix a mechanical problem in a matter of hours when it previously would have taken days. (Cohen, 1997). BP has also digitized quarterly briefings where every presenter makes a video report that is later copied on CD and distributed throughout the company (Cohen, 1997:18).

Hewlett-Packard uses Lotus Notes software, Frequently Asked Questions (FAQ) systems, a “Trainer’s Trading Post,” and networks of experts to share knowledge within the firm (Davenport, 1997). IBM has implemented the “ICM AssetWeb,” an enterprise knowledge infrastructure that includes different tools to facilitate knowledge sharing and collaboration (Huang, 1998: 577). Electronic “portals” that provide a means of pointing knowledge seekers in the right direction are also be used. NCR Corporation uses “indexing” software to act as an electronic portal that links users to the separate databases maintained by the individual business units. (Ferguson, 2002). Establishing IT channels to knowledge outside the organization can result in external inspiration that leads to knowledge creation within the organization (Hauschild et al, 2001:80-81).

Although the majority of the knowledge access initiatives previously mentioned are heavily IT oriented, there are other non-IT measures that are used. For instance, an effective measure that has been employed is putting experienced and new employees together on projects to share tacit knowledge via imitation and adoption (Lesser & Prusak, 2001:102). The benefit of face-to-face interaction for sharing knowledge should not be ignored (Davenport et al, 1997). Formal systems can’t easily store and transfer tacit knowledge (Pfeffer & Sutton, 1999). Other non-IT approaches to improving access to knowledge include assigning product designers to the manufacturing shop floor, co-locating personnel, initiating a job rotation program and networking with external partners, and providing regular training with internal and external experts. (Hauschild et al, 2001:79-80).

### Enhance The Cultural Support For Knowledge Use

A recent McKinsey survey found that “successful companies build a corporate environment that fosters a desire for knowledge among their employees and that ensures its continual application.” (Hauschild et al, 2001:76). Some measures used to enhance culture is to set world class standards for key processes, establish employee incentives, use participative decision-making, and establish cross-functional teams (Hauschild et al, 2001). For example, a Massachusetts company pays bonuses to retiring employees who share their knowledge with replacements (Lesser & Prusak, 2001: 102).

### Manage Knowledge As An Asset

Knowledge/intellectual capital is now being considered part of a firm’s total value along with the tradition categories of capital: physical capital (plant, equipment, and inventory) and financial capital (cash, receivables, and investments) (Lynn, 1998:11). Ramona Dzinkowski reports that a survey by the Canadian Institute of Chartered Accountants (CICA) found that top executives of Canadian Financial Post 300 and U.S. Fortune 500 firms believe that knowledge resources are critical for business success. She also reports that the Brookings Institute has identified an upward trend in the percentage of firms’ market value represented by intangible assets since 1982 (Dzinkowski, 2000:32).

Acknowledging this new category of capital, the challenge then becomes how do you account for the value of knowledge/intellectual capital. A 1997 Ernst & Young Center for Business Innovation survey (as reported by Rudy Ruggles) found measuring the value of knowledge assets was the second biggest difficulty facing firms in their knowledge management activities and only 4% of the respondents claimed that their firm

performed well in the area of knowledge asset measurement (Ruggles, 1998: 82,87). One author states that the traditional balance sheet handicaps a firm's agility by not effectively measuring intellectual capital investment and that new indicators are needed for valuation of intangible assets (Van Buren, 1999:71). Some companies such as Skandia, Dow Chemical, and Buckman Laboratories have developed company-specific measurement systems, but these systems can not be widely applied (Van Buren, 1999:72).

Efforts to address measurement of intellectual capital have focused on stocks of intellectual capital (quantity & value) and effectiveness (change in value, performance impacts (financial & non-financial), and learning) (Van Buren, 1999:72) and the literature includes numerous proposed measurement techniques (Van Buren, 1999; Dzinkowski, 2000; Pfeffer & Sutton, 1999; and Lynn, 1998).

In managing knowledge as an asset, the organization's goal turns to growing and preserving knowledge because it adds value. When Agilent Technologies decided that labor costs needed to be reduced, rather than laying off people and losing the knowledge they possessed, the company instead implemented a 10% across-the-board pay cut (Lesser & Prusak, 2001: 102).

## KM And Change Management

For most organizations, KM is a new way of looking at and doing things, and as such, is subject to the problems incident to implementing changes within an organization. Change management is a subject that continues to receive much focus in business research and authors have studied organizational changes and suggested effective change management techniques (Gibson, Ivancevich, & Donnelly, 2001). Based on case study

research, KM projects require more fundamental behavior shifts than other change initiatives because of the perceived link between knowledge and power (Davenport et al, 1997). Consequently, change management becomes a paramount concern with KM project development and implementation. One of the many factors suggested by researchers to improve the speed and effectiveness of change implementation is management's ability to create readiness for change (Fry & Killing, 1986). In fact, it has been suggested that readiness and commitment to change must be developed before implementation of a change is truly effective (Turner, 1982: 125).

Readiness for change is defined as “a comprehensive attitude that is influenced simultaneously by the content (i.e., what is being changed), the process (i.e., how the change is being implemented), the context (i.e., circumstances under which the change is occurring), and the individuals (i.e., characteristics of those being asked to change) involved and collectively reflects the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt a particular plan to purposefully alter the status quo.” (Holt et al, 2002)

### ***Knowledge Gap Addressed By This Study***

Aeronautical Systems Center (ASC), located at Wright-Patterson Air Force Base, Ohio, is one of the United States Air Force's (USAF's) major product centers. Within ASC are numerous System Program Offices (SPOs) responsible for the management of various aerospace programs including aircraft, missiles, training systems, propulsion, and unmanned air vehicles. ASC also includes various functional staff organizations such as logistics, engineering, finance, and contracting. The ASC Contracting Directorate,

ASC/PK, is responsible for tactical and strategic contractual support to the various SPOs as well as to the Air Force Research Laboratory (AFRL) and the base procurement office. A separate pricing shop is also maintained with pricing personnel being assigned to various programs/organizations as needed. A centralized staff function within ASC/PK handles the policy, management review, human resource management, and other staff functions while individual contractual professionals and supporting clerical personnel are assigned to and located in the various SPOs and the separate contracting shops that support the AFRL and base procurement. These contracting personnel may be further assigned to various Integrated Product Teams (IPTs) within the various organizations.

The contracting function is a predominantly knowledge and process-driven function. There is no physical product other than physical contractual documents and correspondence. Taking into account the nature of the contractual function and the decentralized organizational structure of ASC/PK, sharing and retaining knowledge has become a serious issue for the organization. Consequently, information technology, KM, and business processes have received considerable focus in the acquisition reform initiatives within ASC/PK. ASC/PK has already implemented the following KM projects:

- 1) An expertise *yellow pages* (limited only to PK staff personnel)
- 2) Electronic document archiving
- 3) Internal training by subject matter experts
- 4) An intranet with various functional information, limited lessons learned, and links to other useful world-wide web sites.

These projects are fairly limited in their scope and there is much room to improve the knowledge sharing within the ASC/PK community and thereby improve the efficiency and effectiveness of the organization. Although not always formally labeled as KM projects, knowledge and ways to improve knowledge sharing within ASC/PK (or at a lower organizational level) are common management issues and various initiatives are being implemented at the SPO level. For instance, the C-17 SPO implemented its own document archiving initiative and contractual information sharing project using its internal shared computer drives. Another SPO contracting organization has an electronic interface with the contractor to share information digitally and to foster increased collaboration.

Additional KM initiatives are also being developed at USAF and DoD enterprise levels. One such initiative is the Aeronautical Enterprise Knowledge Management (AEKM) initiative mentioned earlier. ASC/PK is involved in the early implementation planning for this initiative, which is being developed and mandated by higher headquarters.

As discussed above, change management is critical for the success of KM projects and an organization's readiness for change is a critical determinant to successful change implementation. With AEKM on the horizon, other KM projects being investigated within ASC/PK, and individual KM initiatives being pursued by the SPO contracting organizations, it therefore logically follows that ASC/PK management should assess the organization's readiness for change. If there is not currently sufficient readiness for change, management should take action to improve readiness prior to implementation of new KM projects, some of which may involve significant monetary investment. This

researcher's literature review did not uncover any previous studies that evaluated ASC/PK's readiness for change in relation to KM. This constitutes the *knowledge gap* addressed in the study behind this thesis.

### **III. Methodology**

This chapter describes the research methods used to study ASC/PK's readiness for change in regard to KM projects. Inductive reasoning is used in this research effort to form general conclusions from the particular data collected. This chapter covers the research design, population of interest, sampling frame, instrument design, data collection, data analysis techniques, and reliability/validity of this study.

#### **Research Design**

In general, this study involves empirical social research and employed a survey methodology. Survey research is a valid method of scientific inquiry for the social researcher because it is logical, deterministic, parsimonious, general (for understanding a larger population), and specific (specific responses, questions, coding, and scoring) (Babbie, 1990:40-44). This methodology was chosen as the most applicable of the various social science research methods. One of the primary purposes of survey research is to make descriptive assertions about some population (Babbie, 1990:51). This is a good match for this research effort since the study is intended to make descriptive assertions about the readiness for change within ASC/PK. In addition, the survey methodology was the most practical methodology considering that sufficient time and resources were not available to accomplish alternate methods of data collection. The survey methodology also facilitates establishment of a permanent source of information (the data) that can be used for future follow-on analysis (Babbie, 1990:44). This is advantageous for future research on ASC/PK's readiness for change.

Some exploratory research (via a literature review) was required to identify variables that can be used to measure the *readiness for change* construct. This

exploratory research played a vital role in developing a valid survey. Holt et al's definition of readiness for change (Holt et al, 2002), the variables Holt identified for measurement, and the various measurement scales that he compiled from various researchers (Holt, 2002 (interview)) were used to develop the survey instrument for this study.

The study used a cross-sectional survey (data collected at one point in time) (Dooley, 2001) and was distributed in two phases. In the first phase, the survey was distributed via e-mail as a printable questionnaire that was to be completed and physically mailed back to the researcher. The response rate during this phase was poor. In the second phase, the survey was made available in a web-based format in which all responses would be collected on-line via the Internet. Participation by all ASC/PK personnel was desired. The population and details of data collection are discussed in greater detail later in this chapter.

The data collected was analyzed using inferential and descriptive statistics. Descriptive statistics furnishes the means of describing data in a manageable form and inferential statistics facilitates drawing conclusions about a population from the study of a sample within the population (Babbie, 1990:283). The responses received from the survey instrument comprise the data used in the statistical analysis of this study. The data represents the sample information, from the analysis of which, this researcher has drawn conclusions concerning ASC/PK's readiness for change regarding KM projects.

## **Population And Sampling Frame**

The study population was comprised of all personnel assigned to ASC/PK (Air Force Materiel Command (AFMC) being the next higher tier management organization with the USAF). Within ASC/PK there are contract negotiators and administrators (commonly referred to as buyers), contracting officers, pricing specialists, managers, clerical specialists, staffers, and reviewers. All KM projects can potentially impact personnel in all of these job categories; therefore, it logically follows that all ASC/PK personnel constitute the study population. In practice, researchers can seldom guarantee that every element that meets the theoretical definition of the population actually has a chance of being selected in the sample (Babbie, 1990:72). For instance, workers may be inadvertently omitted from personnel lists. Consequently, a distinction is made between the theoretical population and the survey population; the survey population being "...that aggregation of elements from which the survey sample is actually selected." (Babbie, 1990:72) In this study the survey population is comprised of 722 ASC/PK personnel included in the PK-ALL e-mail address group. The survey instrument was distributed to all 722 personnel within this e-mail address group; therefore, these 722 personnel also constitute the sampling frame with the study sample being those personnel who responded to the survey. This study sample is considered a representative sample because all members of the study population had an equal chance of responding.

## **Instrument Design**

### Variables Measured

The literature review in Chapter II provided a definition of readiness for change. The survey instrument in this study utilized 116 items drawn from scales previously developed by other researchers to measure variables that compose readiness for change. Appendix A identifies the 116 items drawn from previously developed scales, identifies the researcher(s) that developed each scale, and addresses existing data on the reliability of the scales. The 116 items identified in Appendix A measure the following variables associated with the readiness for change construct (Holt, 2002 (interview)):

#### **Change Content (what is being changed)**

Semantic Differential Scale - Uses adjective pairs to measure what an object or concept means to the respondent (Kazlow, 1977).

Appropriateness - Measures the extent the respondent feels the change effort is legitimate & appropriate to meet organizational objectives (Holt, 2002).

Personal Valence - Measures respondent's perception as to whether or not he or she will benefit from the change (Holt, 2002).

#### **Process Variables (how the change is being implemented)**

Management Support - Measures respondent's perception of management support and commitment to implementing a change (Holt, 2002).

Participation - Measures respondent's perception of how much he or she was able to give input and participate in the change process (Wanberg & Banas, 2000).

Communication Climate - Measures perception that respondent received necessary communication with higher scores indicating effective communications (Miller, Johnson, & Grau, 1994).

Quality of Information - Measures perception of receiving useful and meaningful information during change process (Miller et al, 1994).

### **Contextual Variables (circumstances under which the change is occurring)**

Perceived Organizational Support - Measures respondent's perception that the organization values their contribution, treats them favorably, and cares about their well-being with high scores indicating that they feel the organization is committed to them (Eisenberger, Huntington, & Sowa, 1986).

Discrepancy - Measures perceived need for change (Holt, 2002 (interview)).

Principal Support - Measures perceived support of the change from peers and managers (Holt, 2002 (interview)).

### **Individual Variables (characteristics of those being asked to change)**

Positive Affect - Measures respondent's disposition relative to feeling enthusiastic, active, and alert with higher scores indicating higher

levels of energy, full concentration, and pleasurable engagement (Watson, Clark, & Tellegen, 1988).

Negative Affect - Measures respondent's disposition toward feeling adverse mood states (such as anger, contempt, disgust, fear, and nervousness) with high scores indicating general levels of distress (Watson et al, 1988).

Efficacy - Measures how much the respondent feels he or she had the necessary skills and ability to implement the change (Holt, 2002).

Innovativeness - Measures respondent's willingness to change (Hurt, Joseph, & Cook, 1977).

Change Commitment - Measures behavioral support for the change in three subcategories: 1) continuance (i.e., being pressured to go along with the change), 2) normative (i.e., feeling obligated to support the change), and 3) affective (i.e., positive feelings about the change and a desire to be part of it) (Herscovitch & Meyer, 2002).

Pessimism - Measures pessimism toward impending change (Wanous, Reichers, & Austin, 2000).

Job Satisfaction - Measures how respondents view their job with high scores indicating overall satisfaction with the job (Cammann, Fichman, Jenkins, & Klesh, 1983).

Turnover Intentions - Measures intentions to leave the organization with low scores indicating an intention to remain in the organization (Camman et al., 1983).

Change Anxiety - Measures concern or anxiety about impending change with high scores indicating little anxiety (Miller et al., 1994).

#### Questionnaire Item Format

The Semantic Differential Scale items took the form of paired words describing general feelings toward the change (i.e., Good & Bad) to which the respondents were asked to indicate the strength of their emotions (on a spectrum from neutral to extremely). The Positive Affect and Negative Affect items used words describing emotions (i.e., Ashamed) to which the respondents were asked to indicate the level to which they were experiencing such emotions (on a spectrum from extremely to very slightly or not at all). All other items were in the form of statements to which the respondents were asked to indicate their level of agreement (on a spectrum from strongly disagree to strongly agree). Respondents provided their responses to all the items via a Likert scale. The Likert scale is a format developed to identify the degree to which respondents hold a particular attitude or perspective (Babbie, 1990:127). The wording of the questionnaire items was administratively revised, where appropriate, to match the subject matter of the study and organizational context, but the content and intent were preserved.

### Questionnaire Organization

The items were divided into three separate questionnaire sections; attitudes toward knowledge sharing, attitudes toward ASC/PK and your job, and attitudes about yourself. The assignment of the various questionnaire items to the separate sections was based on a logical grouping of the items based on their subject and the expert opinion of Major Daniel Holt, a faculty member of the Air Force Institute of Technology (AFIT) who holds a PhD with a focus on change management. Once the items were assigned to sections, they were then randomly ordered (except for the semantic differential scale items and the positive and negative affect items). This randomization was accomplished so that similar items were not in close proximity within the questionnaire. When similar items are in close proximity, respondents tend to become discouraged or annoyed, which may adversely impact response rates.

### Demographics

In addition to the above-mentioned variables, the questionnaire also asked the respondents to provide demographic information as described earlier. Follow-on studies may be conducted to determine how future ASC/PK actions have impacted readiness for change; therefore, it will be necessary to compare individual responses from this study to responses in any follow-on study. To facilitate this comparison while preserving anonymity, individual respondents to the questionnaire were asked to generate an eight-digit identification code comprised of the last two letters of their last name, the last two numbers of their social security number, the last two letters of the mother's maiden name, and the numerical two-digit month of their birth. A copy of the final questionnaire used in this study is set forth in Appendix B.

## **Data Collection**

The questionnaire was provided via e-mail to the ASC Director of Contracting, Mr. Milton Ross. He, in turn, distributed the questionnaire via e-mail to the 722 ASC/PK personnel who were located at Wright-Patterson AFB, Ohio, and who were listed in the PK-ALL e-mail address group. This e-mail distribution was made on December 12, 2002. Participation was voluntary and anonymous. Each respondent printed a hardcopy of the questionnaire, completed it, and returned it to the researcher via inter-office mail. There was no interaction between the researcher and the respondents. This initial distribution yielded 70 responses and several of these responses did not complete the entire questionnaire.

In an effort to increase the response rate, the questionnaire was re-distributed in a web-based format. Mr. Vic Andre, a web administrator for AFIT, transformed the questionnaire into a web-based format and made the questionnaire accessible via the Internet. No content changes were made to the questionnaire. On January 16, 2003, ASC/PK issued a follow-up e-mail to the PK-ALL e-mail address group and provided the web address for the questionnaire. Responses were automatically captured in a Microsoft Access® software database. This second distribution yielded 76 additional responses.

## **Data Analysis**

Data analysis for this research was accomplished using descriptive and inferential statistics with the aid of JMP®, MathCad®, and Microsoft Excel® software. These programs were selected based on the researcher's familiarity with the programs and the

ease with which data is transferred between the programs. Tabulation, data organization, and basic mathematical calculations were accomplished in Excel® and the data set was then transferred to JMP® statistical software for further statistical analysis. Calculations related to normal distribution curves were accomplished using MathCad®.

Within some of the variable categories, the questionnaire items were worded in both a negative and positive manner. The responses were normalized by reverse coding as if all items were worded in a positive manner (e.g., a “strongly disagree” (1) response in a negatively worded item was reverse coded to a “strongly agree” (7)). A mean score by variable category for each respondent was calculated. The sample mean of the respondent mean scores and the sample standard deviation for each variable category were then calculated.

Analysis of the sample means and the standard deviations provides insight into the central tendency and variability of the responses within each category. Based on the sample means and standard deviations and applying the Central Limit Theorem, normal distribution curves were then generated to make inferences about ASC/PKs attitudes within the various variable categories. For the demographics that involved continuous or interval data (age, years worked at ASC/PK, years worked at current job, and years until retirement), dot plots were constructed and lines of best fit calculated to check for correlations between the mean respondent scores and these demographic categories. Similarly, for the demographics that involved nominal data (career, management levels from ASC/PK, gender, level of education, military vs. civilian, civilian with prior military service, military rank, and supervisory status), oneway analysis of variance (ANOVA) assessments were conducted to check for correlations between the mean

respondent scores and these demographic categories. The sample means, standard deviations, distributions, dot plots, best line fits, and ANOVAs are discussed in Chapter IV. Analysis began after collection of the data and was performed to describe and make inferences about ASC/PK's readiness for change.

## **Survey Instrument Reliability And Validity**

Good survey research demands that the researcher assess both reliability (how accurately the data represents the truth) and validity (how well the instrument measures what it intends to measure) (Litwin, 1995). Types of reliability include test-retest, intraobserver, alternate-form, internal consistency and interobserver (Litwin, 1995). Test-Retest reliability measures response consistency of data gathered from the same group over time (Litwin, 1995). Intraobserver reliability measures response consistency of an individual over time (Litwin, 1995). Alternate-Form reliability measures the consistency of responses to alternately worded or alternately ordered items over time (Litwin, 1995). Internal consistency reliability measures how well different items measure the same variable (Litwin, 1995). Interobserver reliability measures consistency of two or more evaluators' assessment of a variable (Litwin, 1995).

Since this study involves a self-administered, cross-sectional survey design, internal consistency reliability is the only applicable type of reliability. Internal consistency reliability has been previously assessed for many of the variables and the coefficient alpha scores from previous research are noted in Appendix A. (Note: The change anxiety variable has a low coefficient alpha score and the discrepancy and

principal support variables are developmental; however, they were included in the survey instrument for this study based on the expert opinion of Major Daniel Holt.) For each of the variable categories in this study, coefficient alpha scores were calculated to verify internal consistency reliability. These scores and their assessment are included in Chapter IV.

Types of validity include face, content, criterion (concurrent and predictive), and construct (Litwin, 1995). Face validity involves a casual assessment of item appropriateness (Litwin, 1995). Content validity is a formal, subjective measure of appropriateness of items from reviewers who are knowledgeable about the subject matter (Litwin, 1995). Concurrent criterion validity is a measure of the appropriateness of an instrument when compared to another instrument that is acknowledged as a *gold standard* for assessing the same variable (Litwin, 1995). Predictive criterion validity is a measure of the appropriateness of an instrument for forecasting the future (Litwin, 1995). Construct validity is a measure of the how meaningful an instrument is based on practical use over multiple settings and populations (Litwin, 1995).

There is no *gold standard* for measuring readiness for change and this study is not predictive in nature; therefore, concurrent and predictive criterion validity are not applicable. The instrument is new and there is no history of its use; therefore, construct validity is not applicable. Face validity and content validity were addressed for this study during the survey review process used prior to distribution. A draft survey was developed and provided to several individuals for input and validation. Face validity was assessed by Ms. Sue L. Tormey, Ms. Donna Sizemore, and Mr. Michael Adams, staff personnel within ASC/PK. Content validity was assessed by Major Daniel T. Holt and

Lieutenant Colonel Summer E. Bartczak. Major Holt is a faculty member of the Air Force Institute of Technology (AFIT) and holds a PhD with a focus on change management. Lieutenant Colonel Bartczak is also a faculty member of AFIT and holds a PhD with a focus on knowledge management. The input received from these individuals was included in the final survey, where appropriate, and they coordinated on the final version of the survey prior to distribution.

## **Summary**

This is an empirical study that uses a cross-sectional survey methodology to make descriptive assertions about ASC/PK's readiness for change relative to KM initiatives and any correlations between readiness for change and various demographic categories. The survey instrument is a compilation of items that previous researchers have used to measure various aspects of readiness for change. The survey instrument also requests demographic information from the respondents. The literature review and preliminary instrument review provided the necessary information, reliability, and validation for the survey instrument used in this study. Chapter IV covers the results and analysis based on the study's methodology.

## **IV. Results and Analysis**

As discussed in previous chapters, the data consisted of survey responses. The survey instrument is included as Appendix B to this thesis. The raw data collected from the surveys is presented in Appendix C. Chapter IV describes the data analysis for the study and addresses the survey response, results analysis, and demographics. The responses from each survey were compiled into various charts and tables, which are analyzed and presented below.

### **Survey Response**

As discussed earlier, the survey was distributed in two phases. The first phase distribution took place in December 2002 and requested hardcopy responses. The second phase distribution took place in January 2003 and was web-based with all responses automatically captured in an electronic database. As mentioned in the previous chapter, the data was normalized by reverse coding the negatively worded questionnaire items thereby consistently making all undesirable responses low values and all desirable responses high values within the response scales. Those items that were reverse coded are identified with a “[R]” in each applicable item’s column header in Appendix C.

Of the survey population of 722, 146 submitted responses for an overall response rate of 20.2 %. For ease of calculations, all demographic responses given in terms of years was converted to months. Based on demographic information collected with the questionnaire, the study sample has the characteristics summarized in Tables 4-1 through 4-7 below.

**Table 4-1 - Primary Career Field**

	<b>Number</b>	<b>Percent of Total Respondents</b>
Buyer	<b>51</b>	<b>34.9%</b>
Contracting Officer	<b>40</b>	<b>27.4%</b>
Pricer	<b>3</b>	<b>2.1%</b>
Procurement Technicians	<b>6</b>	<b>4.1%</b>
Staff	<b>6</b>	<b>4.1%</b>
Management	<b>8</b>	<b>5.5%</b>
Administrative Support	<b>1</b>	<b>0.7%</b>
Not Indicated	<b>31</b>	<b>21.2%</b>

**Table 4-2 - Supervisory Status**

	<b>Number</b>	<b>Percent of Total Respondents</b>
Supervisor*	<b>32</b>	<b>21.9%</b>
Non-Supervisor	<b>85</b>	<b>58.2%</b>
Not Indicated	<b>29</b>	<b>19.9%</b>

\* The supervisors had an average of 13.1 employees each.

**Table 4-3 - Levels Separated from Management (how many levels respondent is separated from ASC/PK Director of Contracting)**

	<b>Number</b>	<b>Percent of Total Respondents</b>
1 Level	<b>25</b>	<b>17.1%</b>
2 Levels	<b>18</b>	<b>12.3%</b>
3 Levels	<b>42</b>	<b>28.8%</b>
4 Levels	<b>24</b>	<b>16.4%</b>
5 Levels	<b>3</b>	<b>2.1%</b>
Not Indicated	<b>34</b>	<b>23.3%</b>

**Table 4-4 - Highest Level of Education Attained**

	<b>Number</b>	<b>Percent of Total Respondents</b>
Doctorate Degree	<b>1</b>	<b>0.7%</b>
Master's Degree	<b>60</b>	<b>41.1%</b>
Bachelor's Degree	<b>45</b>	<b>30.8%</b>
Associate Degree	<b>2</b>	<b>1.4%</b>
High School Diploma	<b>8</b>	<b>5.5%</b>
Some High School	<b>0</b>	<b>0%</b>
Not Indicated	<b>30</b>	<b>20.5%</b>

**Table 4-5 - Gender**

	<b>Number</b>	<b>Percent of Total Respondents</b>
Male	<b>68</b>	<b>46.6%</b>
Female	<b>48</b>	<b>32.9%</b>
Not Indicated	<b>29</b>	<b>20.5%</b>

**Table 4-6 - Civilian/Military Status**

	<b>Number</b>	<b>Percent of Total Respondents</b>	<b>Percent of SubGroup</b>
Civilian	<b>101</b>	<b>69.2%</b>	
Prior Military	<b>17</b>	<b>11.6%</b>	<b>16.8%</b>
No Prior Military	<b>79</b>	<b>54.1%</b>	<b>78.2%</b>
Not Indicated	<b>5</b>	<b>3.4%</b>	<b>5.0%</b>
Military	<b>16</b>	<b>11.0%</b>	
Enlisted	<b>0</b>	<b>0.0%</b>	<b>0%</b>
2 <sup>nd</sup> Lieutenant	<b>2</b>	<b>1.4%</b>	<b>12.5%</b>
1 <sup>st</sup> Lieutenant	<b>2</b>	<b>1.4%</b>	<b>12.5%</b>
Captain	<b>6</b>	<b>4.1%</b>	<b>37.5%</b>
Major	<b>3</b>	<b>2.1%</b>	<b>18.8%</b>
Lt. Colonel	<b>2</b>	<b>1.4%</b>	<b>12.5%</b>
Colonel	<b>0</b>	<b>0.0%</b>	<b>0.0%</b>
Not Indicated	<b>1</b>	<b>0.6%</b>	<b>6.2%</b>
Civ/Mil Status Not Indicated	<b>29</b>	<b>19.8%</b>	

**Table 4-7 - Other Miscellaneous Demographics**

Average Number of Years Worked for ASC/PK (32 did not respond)	<b>12.6 years</b>
Average Number of Years in Current ASC/PK Job (34 did not respond)	<b>3.1 years</b>
Average Number of Years Until Retirement (32 did not respond)	<b>12.7 years</b>
Average Age of Respondents (35 did not respond)	<b>43.4 years</b>

Each of the 21 variables measured was analyzed separately. Within each variable, if the survey respondent failed to provide a response for one or more of the questionnaire items, that particular respondent was excluded for that variable. For example, six questionnaire items were included in the survey to measure management support. If a respondent only responded to five of the six, that respondent was excluded from the analysis of the management support variable. Consequently, although the overall response rate to the survey was 20.2% of the 722 in the population, the response rates for each individual variable were somewhat lower (see Table 4-8 below).

**Table 4-8, Response Rates by Variable Category**

Variable	Complete Responses	Response Rate
Change Content		
Appropriateness	120	16.6%
Valence	121	16.8%
Semantic Differential Scale	120	16.6%
Process		
Management Support	124	17.2%
Participation	119	16.5%
Communication Climate	120	16.6%
Quality of Information	122	16.9%
Context		
Perceived Organizational Support	120	16.6%
Discrepancy	120	16.6%
Principal Support	124	17.2%
Individual		
Positive Affect	117	16.2%
Negative Affect	118	16.3%
Efficacy	121	16.8%
Innovativeness	120	16.6%
Job Satisfaction	120	16.6%
Turnover Intention	119	16.5%
Change Anxiety	120	16.6%
Pessimism	119	16.5%
Change Commitment		
Affective	121	16.8%
Continuance	122	16.9%
Normative	120	16.6%

## Results Analysis

### Reliability - Cronbach's Alpha

Complete responses for each variable were used to compute Cronbach's alpha scores for each variable category. The calculations were accomplished using JMP5® statistical software. The alpha scores are summarized in Table 4-9 below.

**Table 4-9 – Cronbach's Alpha by Variable Category**

Variable	$\alpha$
Change Content	
Appropriateness	.91
Valence	.62
Semantic Differential Scale	.89
Process	
Management Support	.84
Participation	.77
Communication Climate	.78
Quality of Information	.82
Context	
Perceived Organizational Support	.92
Discrepancy	-.19
Principal Support	.65
Individual	
Positive Affect	.95
Negative Affect	.87
Efficacy	.84
Innovativeness	.84
Job Satisfaction	.90
Turnover Intention	.89
Change Anxiety	.66
Pessimism	.83
Change Commitment	
Affective	.88
Continuance	.74
Normative	.64

The standard for internal consistency is a Cronbach's alpha score greater than or equal to 0.70 (DeVellis, 1991; Nunnally & Bernstein, 1994). The valence, discrepancy, principal support, change anxiety, and normative change commitment variables did not meet this threshold; therefore, they were considered unreliable measures and omitted from further analysis.

#### Analysis of Means and Standard Deviations

The mean score per each variable category with a Cronbach's alpha equal to or greater than 0.70 was calculated for each respondent. The sample mean and standard deviation were then calculated based on the means of the individual respondents. The Sample means and standard deviations are summarized in Table 4-10 below:

**Table 4-10, Sample Means and Standard Deviations by Variable Category**

Variable	Scale	Mean	Std Dev
Change Content			
Appropriateness	1-7	5.42	0.87
Semantic Differential Scale	1-7	5.53	1.13
Process			
Management Support	1-7	4.26	1.05
Participation	1-7	4.13	1.16
Communication Climate	1-7	4.22	1.28
Quality of Information	1-7	3.77	1.32
Context			
Perceived Organizational Support	1-7	4.44	1.33
Individual			
Positive Affect	1-5	3.34	0.97
Negative Affect	1-5	4.57	0.47
Efficacy	1-7	5.39	0.93
Innovativeness	1-7	5.07	0.92
Job Satisfaction	1-7	5.47	1.32
Turnover Intention	1-7	5.66	1.43
Pessimism	1-7	4.74	1.22
Change Commitment			
Affective	1-7	5.50	0.86
Continuance	1-7	4.07	1.06

There is no *gold standard* threshold for determining if the mean and standard deviation reflect a sample response that is favorable in regard to readiness for change. When trying to implement a change, it is logically assumed that it is better to have more of the impacted population view the change positively versus negatively. In other words, at least a majority ( $> 50\%$ ) of the impacted population should be positive about the change. Based on this assumption, each of the readiness for change variables listed in

Table 4-10 above were analyzed to make inferences concerning the percentage of the ASC/PK population who would rate each variable positively. Those variables with inferred population percentages greater than 50% were considered to positively contribute to readiness for change.

#### Appropriateness

For an organization that is ready for change, it logically follows that a majority of the population should feel that the change effort is legitimate and appropriate for the organization to meet its goals, in which case a majority of the population would give a mean response higher than neutral (4) for the Appropriateness variable. Based on the sample mean (5.42) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 94.9% of ASC/PK would score higher than neutral (4) for the Appropriateness variable. This suggests that a majority of the ASC/PK personnel feel that knowledge sharing projects are legitimate and appropriate for the organization to meet its goals.

#### Semantic Differential Scale

For an organization that is ready for change, it logically follows that the change in question would be viewed positively by majority of the population, in which case a majority of the population would give a mean response higher than neutral (4) for the Semantic Differential Scale variable. Based on the sample mean (5.53) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 91.2% of ASC/PK would score higher than neutral (4) for the Semantic Differential Scale variable. This suggests that a majority of the ASC/PK personnel have a positive view of knowledge sharing projects.

### Management Support

For an organization that is ready for change, it logically follows that a majority of the population should feel that the organization's leadership and management are committed to and support implementation of the prospective change, in which case a majority of the population would give a mean response higher than neutral (4) for the Management Support variable. Based on the sample mean (4.26) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 59.8% of ASC/PK would score the Management Support variable greater than neutral. This suggests that a majority of the ASC/PK personnel feel that ASC/PK's leadership and management are committed to and support implementation of knowledge sharing projects.

### Participation

For an organization that is ready for change, it logically follows that a majority of the population should feel that they have had input and participated in the change process, in which case a majority of the population would give a mean response higher than neutral (4) for the Participation variable. Based on the sample mean (4.13) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 54.5% of ASC/PK would score higher than neutral (4) for the Participation variable. This suggests that a majority of the ASC/PK personnel feel that they have had input and participated in the change process relative to knowledge sharing projects.

### Communication Climate

For an organization that is ready for change, it logically follows that a majority of the population should feel that they are receiving necessary information, in which case a majority of the population would give a mean response higher than neutral (4) for the Communication Climate variable. Based on the sample mean (4.22) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 56.8% of ASC/PK would score higher than neutral (4) for the Communication Climate variable. This suggests that a majority of the ASC/PK personnel feel that ASC/PK is providing necessary information relative to knowledge sharing projects.

### Quality of Information

For an organization that is ready for change, it logically follows that a majority of the population should feel that they have had useful and meaningful information throughout the change process, in which case a majority of the population would give a mean response higher than neutral (4) for the Quality of Information variable. Based on the sample mean (3.77) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 43.1% of ASC/PK would score higher than neutral (4) for the Quality of Information variable. This suggests that a majority of the ASC/PK personnel do not feel that they have had useful and meaningful information concerning knowledge sharing projects.

### Perceived Organizational Support

For an organization that is ready for change, it logically follows that a majority of the population should feel that the organization values their contributions, treats them

favorably, and cares about their well-being, in which case a majority of the population would give a mean response higher than neutral (4) for the Perceived Organizational Support variable. Based on the sample mean (4.44) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 63.0% of ASC/PK would score higher than neutral (4) for the Perceived Organizational Support variable. This suggests that a majority of the ASC/PK personnel feel that ASC/PK values their contribution, treats them favorably, and cares for their well-being.

#### Positive Affect

For an organization that is ready for change, it logically follows that a majority of the population should be disposed to feel enthusiastic, active, and alert, in which case a majority of the population would give a mean response higher than neutral (3) for the Positive Affect variable. Based on the sample mean (3.34) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 63.7% of ASC/PK would score higher than neutral (3) for the Positive Affect variable. This suggests that a majority of the ASC/PK personnel are disposed to feel enthusiastic, active, and alert.

#### Negative Affect

For an organization that is ready for change, it logically follows that a majority of the population should not be disposed to feel a variety of adverse mood states, in which case a majority of the population would give a mean response higher than neutral (3) for the Negative Affect variable. Based on the sample mean (4.57) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit

Theorem, roughly 100% of ASC/PK would score higher than neutral (3) for the Negative Affect variable. This suggests that a majority of the ASC/PK personnel are not disposed to feel adverse mood states.

### Efficacy

For an organization that is ready for change, it logically follows that a majority of the population should feel that they have the skills and are able to execute the tasks and activities that are associated with the implementation of the prospective change, in which case a majority of the population would give a mean response higher than neutral (4) for the Efficacy variable. Based on the sample mean (5.39) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 93.2% of ASC/PK would score higher than neutral (4) for the Efficacy variable. This suggests that a majority of the ASC/PK personnel feel that they have the skills and are able to execute the tasks and activities that are associated with the implementation of knowledge sharing projects.

### Innovativeness

For an organization that is ready for change, it logically follows that a majority of the population should feel an underlying innovativeness (interpreted as a willingness to change), in which case a majority of the population would give a mean response higher than neutral (4) for the Innovativeness variable. Based on the sample mean (5.07) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 87.8% of ASC/PK would score higher than neutral (4) for the Innovativeness variable. This suggests that a majority of the ASC/PK personnel feel an underlying innovativeness (willingness to change).

### Job Satisfaction

For an organization that is ready for change, it logically follows that a majority of the population should view their jobs positively, in which case a majority of the population would give a mean response higher than neutral (4) for the Job Satisfaction variable. Based on the sample mean (5.47) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 86.7% of ASC/PK would score higher than neutral (4) for the Job Satisfaction variable. This suggests that a majority of the ASC/PK personnel view their jobs positively.

### Turnover Intention

For an organization that is ready for change, it logically follows that a majority of the population should not have intentions of leaving the organization, in which case a majority of the population would give a mean response higher than neutral (4) for the Turnover Intention variable. Based on the sample mean (5.66) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 87.7% of ASC/PK would score higher than neutral (4) for the Turnover Intention variable. This suggests that a majority of the ASC/PK personnel do not intend to leave the organization.

### Pessimism

For an organization that is ready for change, it logically follows that a majority of the population should not feel pessimistic concerning impending changes, in which case a majority of the population would give a mean response higher than neutral (4) for the Pessimism variable. Based on the sample mean (4.74) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem,

roughly 72.8% of ASC/PK would score higher than neutral (4) for the Pessimism variable. This suggests that a majority of the ASC/PK personnel do not feel pessimistic concerning impending knowledge sharing projects.

#### Change Commitment (Affective)

For an organization that is ready for change, it logically follows that a majority of the population should demonstrate behavioral support for the change in the form of having positive feelings about the change and a desire to be part of it, in which case a majority of the population would give a mean response higher than neutral (4) for the Change Commitment (Affective) variable. Based on the sample mean (5.50) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 95.9% of ASC/PK would score higher than neutral (4) for the Change Commitment (Affective) variable. This suggests that a majority of the ASC/PK personnel have positive feelings about knowledge sharing projects and desire to be part of these changes.

#### Change Commitment (Continuance)

For an organization that is ready for change, it logically follows that a majority of the population should demonstrate behavioral support for the change in the form of feeling pressure to go along with the change, in which case a majority of the population would give a mean response higher than neutral (4) for the Change Commitment (Continuance) variable. Based on the sample mean (4.07) and standard deviation observed in this study and assuming a normal distribution based on the Central Limit Theorem, roughly 52.6% of ASC/PK would score higher than neutral (4) for the Change

Commitment (Continuance) variable. This suggests that a majority of the ASC/PK personnel feel pressure to go along with knowledge sharing projects.

#### Overall Readiness For Change

The population proportion inferences described above are summarized in Table 4-11 below.

**Table 4-11, Population Inferences by Variable**

Variable	Approx. % Scoring Above Neutral	Scale
Change Content		
Appropriateness	94.9%	1-7 (4 neutral)
Semantic Differential Scale	91.2%	1-7 (4 neutral)
Process		
Management Support	59.8%	1-7 (4 neutral)
Participation	54.5%	1-7 (4 neutral)
Communication Climate	56.8%	1-7 (4 neutral)
Quality of Information	43.1%	1-7 (4 neutral)
Context		
Perceived Organizational Support	63.0%	1-7 (4 neutral)
Individual		
Positive Affect	63.7%	1-5 (3 neutral)
Negative Affect	100.0%	1-5 (3 neutral)
Efficacy	93.2%	1-7 (4 neutral)
Innovativeness	87.8%	1-7 (4 neutral)
Job Satisfaction	86.7%	1-7 (4 neutral)
Turnover Intention	87.7%	1-7 (4 neutral)
Pessimism	72.8%	1-7 (4 neutral)
Change Commitment		
Affective	95.9%	1-7 (4 neutral)
Continuance	52.6%	1-7 (4 neutral)

Of these 16 variables, the data suggests that a majority of the ASC/PK population would score 15 of the variables positively (higher than neutral). This suggests that overall the population is ready for change relative to KM projects.

## **Demographics**

### Continuous Data Items

In order to determine if the data suggests a correlation between readiness for change and any of the demographic categories consisting of continuous data (age, years worked at ASC/PK, years worked at current job, and years until retirement), dot plots of the data were constructed and a line of best fit calculated using JMP5® (see Appendix D for dot plots with lines of best fit). For ease of analysis, all demographic responses given in terms of years were converted to months. If there was a correlation between a variable and any one of the demographic categories listed above, there would be a recognizable pattern to the data that reflects this correlation. Fitting a line of best fit through the data tests for linear relationships (with a high R-squared value suggesting a strong linear relationship). A visual inspection of the dot plots tests for any other recognizable relationships. The R-squared values from fitting a line of best fit through the data are summarized in Table 4-12 below.

**Table 4-12 – R-Squared for Means by Demographics (via fitting a line)**

Variable	Age	Years at PK	Years at Current Job	Months from Retirement
Change Content				
Appropriateness	0.001057	0.010609	0.015643	8.806e-7
Semantic Differential Scale	0.034835	0.02885	0.018004	0.039441
Process				
Management Support	0.006492	0.004103	0.007863	0.002743
Participation	0.007788	0.002946	0.001992	0.003511
Communication Climate	0.010926	0.005244	0.004532	0.005051
Quality of Information	0.006061	0.008998	0.000001	0.0021
Context				
Perceived Organizational Support	0.000125	0.000119	0.001696	0.000005
Individual				
Positive Affect	0.047506	0.016734	0.013416	0.040002
Negative Affect	0.007051	0.002093	0.004545	0.001998
Efficacy	0.074837	0.086022	0.046178	0.027925
Innovativeness	0.026127	0.071842	0.011252	0.03684
Job Satisfaction	0.002883	0.001047	0.002964	0.006833
Turnover Intention	0.012263	0.037743	0.012022	0.001745
Pessimism	0.002275	0.000018	0.003438	0.00037
Change Commitment				
Affective	0.008449	0.029187	0.021831	0.00217
Continuance	0.000004	0.00821	0.00043	0.001371

It is readily apparent from the R-squared values above, that the lines of best fit do not suggest a linear relationship. A visual inspection of the dot plots also does not suggest any recognizable relationships (the dot plots reflect non-patterned “data clouds” – See Appendix D). Based on this analysis, there is no evidence to suggest a correlation between readiness for change and the continuous data demographics.

#### Nominal Data Items

In order to determine if the data suggests a correlation between readiness for change and any of the demographic categories consisting of nominal data (career, management levels from ASC/PK, gender, level of education, military vs. civilian,

civilian with prior military service, military rank, and supervisory status), oneway ANOVA assessments were conducted using JMP5®. If there was a correlation between a variable and any one of the demographic categories listed above, the summary of fit calculations generated by JMP5® for the oneway ANOVA would include a high R-squared value. The R-squared values from the oneway ANOVA assessments are summarized in Table 4-13 below.

**Table 4-13 – R-Squared for Means by Demographics (via oneway ANOVA)**

Variable	Career	Levels from PK	Gender	Level of Ed.	MIL vs. CIV	CIV w/ Prior Military	MIL Rank	Supervisory Status
Change Content								
Appropriateness	0.087373	0.045504	0.020316	0.015921	0.000517	0.010384	0.201063	0.000134
Semantic Diff. Scale	0.068539	0.025115	0.019103	0.053367	0.002828	0.007236	0.166275	0.000354
Process								
Management Support	0.082228	0.048238	0.001292	0.069348	0.000164	0.030742	0.37839	0.00028
Participation	0.135114	0.102818	0.000011	0.096265	0.000644	0.02649	0.196371	0.02974
Comm. Climate	0.045795	0.096308	0.002566	0.044237	0.000044	0.078324	0.642646	0.015526
Quality of Information	0.081903	0.064687	0.000356	0.035358	0.009201	0.027719	0.259578	0.000127
Context								
Perceived Org. Support	0.06466	0.059457	0.001655	0.109152	0.00401	0.027554	0.190168	0.019999
Individual								
Positive Affect	0.114909	0.021294	0.014423	0.048264	0.00867	0.007164	0.422781	0.006533
Negative Affect	0.002522	0.011586	0.010166	0.025088	0.007631	0.020677	0.078938	0.009633
Efficacy	0.058435	0.011207	0.020488	0.016736	0.010287	0.017787	0.35078	0.007843
Innovativeness	0.026851	0.018024	0.006589	0.037522	0.018886	0.032757	0.273003	0.026542
Job Satisfaction	0.067443	0.028879	0.000036	0.073199	0.023135	0.01157	0.322164	0.010597
Turnover Intention	0.078324	0.032275	0.007432	0.040698	0.042177	0.002575	0.196477	0.021812
Pessimism	0.088101	0.026326	0.005441	0.046351	0.002904	0.024054	0.241928	0.001585
Change Commitment								
Affective	0.101623	0.031668	0.000456	0.029215	0.006266	0.01796	0.298327	0.000054
Continuance	0.030316	0.018372	0.002045	0.035103	0.0336	0.01893	0.095951	0.010426

Although the R-squared values are significantly higher within the military rank category (particularly for the Communication Climate variable), the extremely limited number of observations within this category (15 observations) render the oneway ANOVA assessment results highly suspect. Based on this assessment and the R-squared

values above, there is no evidence to suggest a correlation between readiness for change and the nominal data demographics.

## **Summary**

This chapter provided the results from the data collected. Of the 21 variables originally included in the survey instrument, 16 were determined to be reliable measures. Of the 16 reliable measures, 15 suggested positive characteristics of the ASC/PK population that in turn suggest that overall ASC/PK is ready for KM changes. Chapter V presents recommendations concerning ASC/PK's readiness for change relative to KM projects.

## **V. Conclusions and Recommendations**

### **Overview**

This chapter provides conclusions and recommendations for ASC/PK concerning readiness for implementation of KM projects. An organization's readiness for change is crucial to implementation success. Conclusions, recommendations, study limitations, and suggestions for further study are discussed below.

### **Conclusions and Recommendations**

#### Primary Research Question

Does the culture within ASC/PK currently exhibit a level of readiness for change to facilitate successful implementation of ICM/KM projects?

#### **Conclusions**

Twenty-one variables were identified as measures of readiness for change within an organization. Survey data was gathered for the 21 variables and based on this data 16 of the variables were determined to be reliable measures of change readiness. The individual respondent mean scores and the sample mean score and standard deviation were computed for each of the 16 reliable variables and a distribution analysis was then performed. Of the 16 reliable variables, the sample data was positive for 15 of the variables suggesting that the sample exhibited an overall readiness for change. Based on the sample, we can infer that the ASC/PK population exhibits an overall readiness for change.

## **Recommendations**

Since ASC/PK exhibits an overall readiness for change, management should press ahead with implementation of KM projects. As revealed in the literature review, cultural readiness for change is crucial for successful implementation of KM projects; therefore, ASC/PK can proceed with implementation of KM projects with the expectation that readiness for change will not be a primary impediment. Notwithstanding an overall readiness for change, it logically follows that the higher the level of readiness for change, the higher the chances for successful implementation. Consequently, ASC/PK should consider taking steps to improve readiness for change.

The first areas of emphasis should be Quality of Information and Positive Affect variables. Based on the negative scoring of the survey respondents, it can be inferred that a majority of the ASC/PK population do not feel that they have had useful and meaningful information concerning knowledge sharing projects and are not disposed to feel enthusiastic, active, and alert. ASC/PK should consider means of improving these cultural problems.

The second area of emphasis should be those variables that were marginally positive. These marginally positive variables are those for which the study infers that 50-60% of the population would score positively (Management Support, Participation, Communication Climate, and Change Commitment (Continuance)). These areas are currently contributing to an overall cultural readiness for change, but could easily degrade. Consequently, ASC/PK should consider taking steps to increase management support for KM projects, increase the workforce's participation in implementation of such projects, provide more necessary information to the workforce concerning KM

projects, and foster an organizational culture where employees feel pressure to implement such changes.

#### Secondary Research Question

Is there a correlation between specific demographic characteristics and readiness for change within ASC/PK?

#### **Conclusions**

Various demographic information was collected via the survey and each demographic characteristic was assessed to determine if there was a correlation with any of the readiness for change variables. Fitting a line of best fit, visual evaluation of data dot plots, and oneway ANOVA assessments were used where applicable to check for such correlations. No correlations were found within the sample; therefore, it can be inferred that no such correlations exist within the study population and there is no correlation between demographics and readiness for change within ASC/PK.

#### **Recommendations**

Since there is no evidence suggesting that a demographic correlation to readiness for change exists, any efforts taken by ASC/PK to improve readiness for change should be directed to the entire ASC/PK population without specific focus upon any particular demographic group.

#### **Study Limitations**

##### Survey Timing

About a month prior to the initial distribution of the survey, it was publicly announced that personnel lay-offs were likely at Wright-Patterson Air Force Base in 2004

and for several years thereafter. Personnel lay-offs tend to be highly emotional and have negative cultural impacts. Since the initial announcement of lay-offs, some employees have received letters stating that their positions have been abolished and that they may be laid-off. As the lay-offs draw closer, ASC/PK's culture and their readiness for change may be impacted. In regard to this study, ASC/PK's readiness for change may have changed during the time that elapsed between the collection of the survey data and the finalization of this thesis.

#### Survey Distribution Phasing

As described earlier, there was a month delay between the two separate distributions of the survey. Although none was observed, some event may have occurred during that month timeframe that would impact the population's overall readiness for change. Such a possible event has not been accounted for in the analysis and the study is still considered a cross-functional survey versus a longitudinal survey methodology.

#### Demographic Data on Respondent's Career

The survey provided for an open-ended answer to the question of the respondent's career rather than giving a finite choice of responses. Consequently, there was some variability and ambiguity in responses. Some of the responses required the researcher's interpretation in order to assign them to 1 of the 7 career categories identified within this study. This may have contributed to some respondents being assigned to inaccurate career categories.

#### Respondent Understanding of Subject Matter

The researcher realized that KM may not be a well known subject to some of the ASC/PK workforce; therefore, the survey included a section that described what was

meant by knowledge sharing projects. Not notwithstanding this attempt to describe and clarify KM, some of the respondents may still have not understood the subject matter. This was confirmed when several respondents provided survey comments in which they expressed that they were unfamiliar with KM concepts and/or did not really understand the concept of knowledge sharing projects. This may have contributed to error in the data.

#### Positive Attitudes Of Survey Respondents

There is a perception that people who take the time to voluntarily complete a lengthy survey are people with generally positive attitudes. Conversely, it is perceived that people with generally negative attitudes will not take the time to voluntarily participate in such surveys. If this is true, the survey data may be biased (skewed to positive responses) and the inferences made from the data may not reflect the study population.

#### **Suggestions for Further Study**

This study addressed ASC/PK's readiness for change in relation to implementation of KM projects in general. A follow-on study that addresses one or more specific KM projects may be helpful in making a decision as to the timing or continuation of implementation of those specific projects. The ASC/PK population may be more ready for certain projects than others. A follow-on study would help determine if this is the case or not.

Also, a follow-on study may be useful to compare ASC/PK's readiness for change over time. This would especially be useful if ASC/PK take steps to improve readiness for

change. Such a follow-on study could be used as a gauge as to whether or not ASC/PK's efforts had any impact on the individual variables or overall readiness for change.

Expansion of the study to other organizations within ASC or more overarching organizations such as Air Force Materiel Command, the United States Air Force, or the Department of Defense would provide insight into the readiness for change on a broader scale. Comparisons could be drawn between individual organizations or lower-tier organizations could benchmark themselves against the higher-tier organization to determine if they are good or bad performers within the higher-tier organization. A broader study would also assist decision makers when considering enterprise-wide KM projects.

**Appendix A – Survey Questionnaire Items Used for the Survey Instrument, Their Sources and Existing Reliability Data**

<b>CHANGE CONTENT VARIABLES (22 Items)</b>	<b>Questionnaire Items</b>
<p>Appropriateness (Holt, 2002) – Measures the extent the respondent feels the change effort is legitimate &amp; appropriate to meet organizational objectives.</p> <p>Coefficient alphas of .94 and .80 respectively were achieved on 2 separate organizational studies. (Holt, 2002)</p>	<p>It doesn't make much sense for us to initiate this change.</p> <p>I think that the organization will benefit from this change.</p> <p>This change makes my job easier.</p> <p>This change will improve our organization's overall efficiency.</p> <p>There are legitimate reasons for us to make this change.</p> <p>When this change is implemented, I don't believe there is anything for me to gain.</p> <p>There are a number of rational reasons for this change to be made.</p> <p>In the long run, I feel it will be worthwhile for me if the organization adopts this change.</p> <p>The time we are spending on this change should be spent on something else.</p> <p>This change matches the priorities of our organization.</p>
<p>Valence (Holt, 2002) – Measures respondent's perception as to whether or not he or she will benefit from the change.</p> <p>Coefficient alphas of .66 and .65 respectively were achieved on 2 separate organizational studies. (Holt, 2002)</p>	<p>I am worried I will lose some of my status in the organization when this change is implemented.</p> <p>This change will disrupt many of the personal relationships I have developed.</p> <p>My future in this job will be limited because of this change.</p> <p>After this change, I expect to be recognized more for the work I do.</p> <p>This change makes it easier for me to feel like I'm part of the [organization's name] "team."</p> <p>This change gives me the ability to make decisions about how my work is done.</p>
<p>Semantic Differential Scale (Kazlow, 1977) – Uses adjective pairs to measure what an object or concept means to the respondent.</p> <p>Kazlow does not give specific reliability estimates, but does reference other literary sources that address the reliability and validity of using semantic differential scales</p>	<p>Good, Bad Progressive, Regressive Foolish, Wise Ineffective, Effective Worthless, Valuable Positive, Negative</p>

<b>PROCESS VARIABLES (17 Items)</b>	<b>Questionnaire Items</b>
<p>Management Support (Holt, 2002) – Measures respondent's perception of management support and commitment to implementing a change.</p> <p>Coefficient alphas of .87 and .79 respectively were achieved on 2 separate organizational studies. (Holt, 2002)</p>	<p>Our senior leaders have encouraged all of us to embrace this change.</p> <p>Our organization's top decision-makers have put all their support behind this change effort.</p> <p>Every senior manager has stressed the importance of this change.</p> <p>I think we are spending a lot of time on this change when the senior managers don't even want it implemented.</p> <p>This organization's most senior leader is committed to this change.</p> <p>Management has sent a clear signal this organization is going to change.</p>
<p>Participation (Wanberg &amp; Banas, 2000) – Measures respondent's perception of how much he or she was able to give input and participate in the change process.</p> <p>Coefficient alpha = .72 (Wanberg &amp; Banas, 2000)</p>	<p>I was able to ask questions about this change.</p> <p>I was able to participate in the implementation of this change.</p> <p>I had some control over the changes that were proposed.</p> <p>If I wanted to, I could have had input into the decisions being made about our future programs.</p>
<p>Communication Climate (Miller, Johnson, &amp; Grau, 1994) – Measures perception that respondent received necessary communication with higher scores indicating effective communications.</p> <p>Cronbach's coefficient alpha = .79 (Miller et al., 1994)</p>	<p>I feel like no one ever tells me anything about what's going on around here.</p> <p>I am thoroughly satisfied with the information I receive about what's going on at [organization's name].</p> <p>My performance would improve if I received more information about what's going on here.</p> <p>The people who know what's going on here at [organization's name] do not share information with me.</p>
<p>Quality of Information (Miller et al, 1994) – Measures perception of receiving useful and meaningful information during change process.</p> <p>Cronbach's coefficient alpha = .86 (Miller et al., 1994)</p>	<p>The information I received about this change was timely.</p> <p>The information I received about this change has adequately answered my questions.</p> <p>The information I received about this change helped me understand the change.</p>

<b>CONTEXTUAL VARIABLES (11 Items)</b>	<b>Questionnaire Items</b>
<p>Perceived Organizational Support (Eisenberger, Huntington, &amp; Sowa, 1986) – Measures respondent's perception that the organization values their contribution, treats them favorably, and cares about their well being with high scores indicating that they feel the organization is committed to them.</p> <p>Reliability = The original item scale used by Eisenberger et al included 32 items. Recent research using 9 of the items resulted in an alpha coefficient of .92. (Wayne, et al., 2002)</p>	<p>The organization shows very little concern for me. The organization is willing to extend itself in order to help me perform my job to the best of my ability.</p> <p>Even if I did the best job possible, the organization would fail to notice me.</p> <p>The organization takes pride in my accomplishments.</p> <p>The organization cares about my general satisfaction at work.</p> <p>The organization really cares about my well-being.</p>
<p>Discrepancy (Holt, 2002 (interview)) – Measures perceived need for change.</p> <p>Reliability = Scale is developmental. No prior reliability data available. (Holt, 2002 (interview))</p>	<p>Our organization has problems that need to be addressed.</p> <p>There is a clear vision guiding [organization's name].</p> <p>There is a clear need for [organization's name] to change our business.</p>
<p>Principal Support (Holt, 2002 (interview)) – Measures perceived support of the change from peers and managers.</p> <p>Reliability = Scale is developmental. Scale is developmental. No prior reliability data available. (Holt, 2002 (interview))</p>	<p>The manager of my unit was committed to making the change effort a success.</p> <p>My peers have supported this change effort.</p>

INDIVIDUAL VARIABLES (66 Items)	Questionnaire Items
<p>Positive Affect (Watson, Clark, &amp; Tellegen, 1988) – Measures respondent's disposition relative to feeling enthusiastic, active, and alert with higher scores indicating higher levels of energy, full concentration, and pleasurable engagement.</p> <p>Cronbach's coefficient alpha = .86 to .90 (Watson et al., 1988)</p>	Interested Alert Excited Inspired Strong Determined Attentive Enthusiastic Active Proud
<p>Negative Affect (Watson et al, 1988) – Measures respondent's disposition toward feeling adverse mood states (such as anger, contempt, disgust, fear, and nervousness) with high scores indicating general levels of distress.</p> <p>Cronbach's coefficient alpha = .84 to .87 (Watson et al., 1988)</p>	Irritable Distressed Ashamed Upset Nervous Guilty Scared Hostile Jittery Afraid
<p>Efficacy (Holt, 2002) – Measures how much the respondent feels he or she had the necessary skills and ability to implement the change.</p> <p>Coefficient alphas of .82 and .79 respectively were achieved on 2 separate organizational studies. (Holt, 2002)</p>	I do not anticipate any problems adjusting to the work I will have when this change is adopted. When we implement this change, I feel I can handle it with ease. When I set my mind to it, I can learn everything that will be required when this change is adopted. There are some tasks that will be required when we change I don't think I can do well. I have the skills that are needed to make this change work. My past experiences make me confident that I will be able to perform successfully after this change is made.

INDIVIDUAL VARIABLES (continued)	Questionnaire Items
<p>Innovativeness (Hurt, Joseph, &amp; Cook, 1977)  – Measures respondent's willingness to change.</p> <p>Reliability = .94 (Hurt et al., 1977)</p>	<p>I am generally cautious about accepting new ideas.  I rarely trust new ideas until I can see whether the vast majority of people around me accept them.  I am aware that I am usually one of the last people in my group to accept something new.  I am reluctant about adopting new ways of doing things until I see them working for people around me.  I tend to feel that the old way of living and doing things is the best way.  I am challenged by ambiguities and unsolved problems.  I must see other people using new innovations before I will consider them.  I often find myself skeptical of new ideas.</p>
<p>Change Commitment (Herscovitch &amp; Meyer, 2002) – Measures behavioral support for the change.</p> <p>Alpha Coefficients = .94 (Affective)  .94 (Continuance)  .86 (Normative)  (Herscovitch &amp; Meyer, 2002)</p>	<p><u>Affective:</u>  I believe in the value of this change.  This change is a good strategy for this organization.  I think that management is making a mistake by introducing this change.  This change serves an important purpose.  Things would be better without this change.  This change is not necessary.</p> <p><u>Continuance:</u>  I have no choice but to go along with this change.  I feel pressure to go along with this change.  I have too much at stake to resist this change.  It would be too costly for me to resist this change.  It would be risky to speak out against this change.  Resisting this change is not a viable option for me.</p> <p><u>Normative:</u>  I feel a sense of duty to work toward this change.  I do not think it would be right of me to oppose this change.  I would not feel badly about opposing this change.  It would be irresponsible of me to resist this change.  I would feel guilty about opposing this change.  I do not feel any obligation to support this change.</p>

INDIVIDUAL VARIABLES (continued)	Questionnaire Items
<p>Pessimism (Wanous, Reichers, &amp; Austin, 2000) – Measures pessimism toward impending change.</p> <p>Alpha Coefficient = .86 (Wanous &amp; Reichers, 2000)</p>	<p>Most of the programs that are supposed to solve problems around here will not do much good. Attempts to make things better around here will not produce good results.</p> <p>Suggestions on how to solve problems will not produce much real change.</p> <p>Plans for future improvement will not amount to much.</p>
<p>Job Satisfaction (Cammann, Fichman, Jenkins, &amp; Klesh, 1983) – Measures how respondents view their job with high scores indicating overall satisfaction with the job.</p> <p>Reliability = .77 (Camman et al., 1983)</p>	<p>All in all, I am satisfied with my job.</p> <p>In general, I don't like my job.</p> <p>In general, I like working here.</p>
<p>Turnover Intention (Camman et al., 1983) – Measures intentions to leave the organization with low scores indicating an intention to remain in the organization.</p> <p>Reliability = .83 (Camman et al., 1983)</p>	<p>I am actively looking for a job outside [organization's name].</p> <p>I am seriously thinking about quitting my job.</p> <p>As soon as I can find a better job, I'll leave [organization's name].</p> <p>I often think about quitting my job at [organization's name].</p>
<p>Change Anxiety (Miller et al., 1994) – Measures concern or anxiety about impending change with high scores indicating little anxiety.</p> <p>Cronbach's Coefficient Alpha = .51 (Miller et al., 1994)</p>	<p>I feel anxious about the implementation of this change.</p> <p>The thought of this change worries me.</p> <p>Right now, I am somewhat resistant to this change.</p>

## Appendix B – Survey Instrument



### **READINESS FOR CHANGE QUESTIONNAIRE**

Air Force Institute of Technology

#### **DEPARTMENT OF THE AIR FORCE**

AIR FORCE MATERIEL COMMAND (AFMC)



Dear Team Member

Please take a few minutes to complete this survey about possible implementation of initiatives to foster improved knowledge sharing. Although your participation is voluntary, we need your feedback to understand how you feel about this change effort. We will use this information to help Senior leadership make future decisions and to ensure that we effectively address your concerns while meeting organizational goals.

Conducted by the Air Force Institute of Technology for the Air Force Materiel Command

## Readiness for change survey

**Purpose:** Our research team is investigating readiness for implementation of initiatives to improve knowledge sharing. Our goal is to more fully understand ASC/PK's readiness for this type of change and give leaders information that will help them understand your concerns.

**Confidentiality:** We would greatly appreciate your completing this survey. Your input is important for us to completely understand this change. **ALL ANSWERS ARE STRICTLY CONFIDENTIAL.** No one outside the research team will ever see your questionnaire. Findings will be reported at the group level only. We ask for some demographic and unit information in order to interpret results more accurately, and in order to link responses for an entire unit. Reports summarizing trends in large groups may be published. There may be a follow-up questionnaire at a later date to make comparisons over time. In order to facilitate such comparisons, an 8-digit, anonymous code will be developed for each respondent. To create your code, please fill in the information requested below.

Last two letters of your last name (Print)	Last two numbers of your Social Security #	Last two letters of your mother's maiden name	Month of your birth (two digits – i.e. "01" for January)

**Contact information:** If you have any questions or comments about the survey contact Martin Trent at the fax, mailing address, or e-mail address listed below.

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Mr. Martin R. Trent  
c/o AFIT/ENA BLDG 640  
2950 P Street  
Wright-Patterson AFB OH 45433-7765  
Email: [martin.trent@afit.edu](mailto:martin.trent@afit.edu)  
Fax: DSN 986-4699; commercial (937) 656-4699

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### INSTRUCTIONS

- Base your answers on your own feelings and experiences
- Read directions carefully and mark only one answer for each question
- If completing a paper version , please write clearly making dark marks (feel free to use a blue or black ink pen that does not soak through the paper)
- Avoid stray marks and if you make corrections erase marks completely

### **MARKING EXAMPLES**

Right



Wrong



**PART I**  
**ATTITUDES**  
**TOWARD KNOWLEDGE**  
**SHARING**

We would like to understand how you feel about the implementation of initiatives to improve knowledge sharing within your organization. The following questions will help us do that. Unless specifically told otherwise, the terms, “organization” refers to the ASC/PK buying community (including staff and support) and “top management” refers to the ASC/PK executive staff (e.g., PK front office). Also, knowledge sharing initiatives are projects that make it easier and/or faster to share knowledge throughout the organization. Hypothetically speaking, such initiatives might include the following:

- 1) Web-based “yellow pages” that list points of contact throughout PK (including the co-located SPO individuals) for various topics;
- 2) Computer software and hardware that allows multiple individuals (regardless of geographic location) to collaborate real-time (i.e. web cams and video conferencing capability at each desktop);
- 3) Extensive digital knowledge libraries that capture best practices in written, audio, and video formats (i.e. web-accessible video interviews with retiring personnel who have extensive experience in certain processes);
- 4) Monetary award incentives for sharing knowledge with others; and/or
- 5) Job performance standards based on knowledge sharing.

Such initiatives may be mandated by management levels above ASC/PK and may be implemented over multiple organizations besides just ASC/PK.

The following scale consists of a number of paired words that measure the meaning of the changes to you personally. Please read each pair of words and indicate your general feelings toward such knowledge sharing changes as they pertain to that particular pair of words. The scale is a spectrum with the middle being neutral and your feelings getting stronger as you move farther out toward each word. Use the following scale to indicate your answers. For example, if you believe such changes are extremely foolish, you would mark the “1” in the row with the spectrum “Foolish” to “Wise.”

①	②	③	④	⑤	⑥	⑦		
Extremely	Moderately	A little	Neutral	A little	Moderately	Extremely		
Good	①	②	③	④	⑤	⑥	⑦	Bad
Progressive	①	②	③	④	⑤	⑥	⑦	Regressive
Foolish	①	②	③	④	⑤	⑥	⑦	Wise
Ineffective	①	②	③	④	⑤	⑥	⑦	Effective
Worthless	①	②	③	④	⑤	⑥	⑦	Valuable
Positive	①	②	③	④	⑤	⑥	⑦	Negative

In this next sub-section, answer each of the following statements by filling in the circle for the number that indicates the extent to which you agree that the statement is true. Please note that this is a different measurement scale from the preceding sub-section.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree or Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
1. The manager of my unit is committed to making such knowledge sharing change efforts a success.				① ② ③ ④ ⑤ ⑥ ⑦		
2. I have no choice but to go along with such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
3. Such knowledge sharing changes make it easier for me to feel like I'm part of the "team."				① ② ③ ④ ⑤ ⑥ ⑦		
4. I think we are spending a lot of time on such changes when the senior managers don't even want them implemented.				① ② ③ ④ ⑤ ⑥ ⑦		
5. I believe in the value of such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		
6. The time we would spend on such changes should be spent on something else.				① ② ③ ④ ⑤ ⑥ ⑦		
7. Things would be better without such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		
8. I think that the organization will benefit from changes that improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
9. My past experiences make me confident that I will be able to perform successfully after such changes are made.				① ② ③ ④ ⑤ ⑥ ⑦		
10. Our organization's top decision-makers have put all their support behind such change efforts.				① ② ③ ④ ⑤ ⑥ ⑦		
11. Implementation of knowledge sharing changes will disrupt many of the personal relationships I have developed.				① ② ③ ④ ⑤ ⑥ ⑦		
12. In the long run, I feel it will be worthwhile for me if the organization adopts changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
13. Such changes give me the ability to make decisions about how my work is done.				① ② ③ ④ ⑤ ⑥ ⑦		
14. Resisting such knowledge sharing changes is not a viable option for me.				① ② ③ ④ ⑤ ⑥ ⑦		
15. I have too much at stake to resist such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
16. Changes that improve knowledge sharing will make my job easier.				① ② ③ ④ ⑤ ⑥ ⑦		
17. The information I received about such changes helped me understand the changes.				① ② ③ ④ ⑤ ⑥ ⑦		
18. I feel anxious about the implementation of such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		

(1) Strongly Disagree	(2) Disagree	(3) Slightly Disagree	(4) Neither Agree or Disagree	(5) Slightly Agree	(6) Agree	(7) Strongly Agree
19. I am worried I will lose some of my status in the organization when such changes are implemented.				① ② ③ ④ ⑤ ⑥ ⑦		
20. I would feel guilty about opposing such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		
21. The information I received about such changes has adequately answered my questions.				① ② ③ ④ ⑤ ⑥ ⑦		
22. Attempts to make things better around here will not produce good results.				① ② ③ ④ ⑤ ⑥ ⑦		
23. Every senior manager has stressed the importance of changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
24. When we implement such knowledge sharing changes, I feel I can handle it with ease.				① ② ③ ④ ⑤ ⑥ ⑦		
25. After such changes, I expect to be recognized more for the work I do.				① ② ③ ④ ⑤ ⑥ ⑦		
26. Changes that improve knowledge sharing will improve our organization's overall efficiency.				① ② ③ ④ ⑤ ⑥ ⑦		
27. I have some control over the knowledge sharing changes that will be proposed.				① ② ③ ④ ⑤ ⑥ ⑦		
28. My peers have supported such a knowledge sharing change effort.				① ② ③ ④ ⑤ ⑥ ⑦		
29. I am able to ask questions about this change.				① ② ③ ④ ⑤ ⑥ ⑦		
30. I feel a sense of duty to work toward such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
31. I feel pressure to go along with such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
32. I think that management is making a mistake by introducing such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
33. It would be risky to speak out against such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
34. Our senior leaders have encouraged all of us to embrace changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
35. Changes that will improve knowledge sharing match the priorities of our organization.				① ② ③ ④ ⑤ ⑥ ⑦		
36. Management has sent a clear signal that this organization is going to make changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
37. There are legitimate reasons for us to make changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		

(1) Strongly Disagree	(2) Disagree	(3) Slightly Disagree	(4) Neither Agree or Disagree	(5) Slightly Agree	(6) Agree	(7) Strongly Agree
38. This organization's most senior leader is committed to such change.				① ② ③ ④ ⑤ ⑥ ⑦		
39. I do not think it would be right of me to oppose such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		
40. Such knowledge sharing changes serve an important purpose.				① ② ③ ④ ⑤ ⑥ ⑦		
41. When I set my mind to it, I can learn everything that will be required when such changes are adopted.				① ② ③ ④ ⑤ ⑥ ⑦		
42. Such changes are not necessary.				① ② ③ ④ ⑤ ⑥ ⑦		
43. There are some tasks that will be required when we change I don't think I can do well.				① ② ③ ④ ⑤ ⑥ ⑦		
44. I have the skills that are needed to make such knowledge sharing changes work.				① ② ③ ④ ⑤ ⑥ ⑦		
45. It would be too costly for me to resist such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
46. Such knowledge sharing changes are a good strategy for this organization.				① ② ③ ④ ⑤ ⑥ ⑦		
47. There are a number of rational reasons for such changes to be made.				① ② ③ ④ ⑤ ⑥ ⑦		
48. I do not anticipate any problems adjusting to the work I will have when such knowledge sharing changes are adopted.				① ② ③ ④ ⑤ ⑥ ⑦		
49. It doesn't make much sense for us to initiate changes that will improve knowledge sharing.				① ② ③ ④ ⑤ ⑥ ⑦		
50. My future in this job will be limited because of such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
51. The information I received about such knowledge sharing changes was timely.				① ② ③ ④ ⑤ ⑥ ⑦		
52. The thought of such changes worries me.				① ② ③ ④ ⑤ ⑥ ⑦		
53. I would not feel badly about opposing such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
54. When changes that improve knowledge sharing are implemented, I don't believe there is anything for me to gain.				① ② ③ ④ ⑤ ⑥ ⑦		
55. I am able to participate in the implementation of such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
56. Right now, I am somewhat resistant to such knowledge sharing changes.				① ② ③ ④ ⑤ ⑥ ⑦		
57. It would be irresponsible of me to resist such changes.				① ② ③ ④ ⑤ ⑥ ⑦		
58. I do not feel any obligation to support such changes.				① ② ③ ④ ⑤ ⑥ ⑦		

**PART II**  
**ATTITUDES TOWARD ASC/PK**  
**AND YOUR JOB**

**We would like to understand how you generally feel about ASC/PK and your job. The following questions will help us do that. You should answer each statement by filling in the circle for the number that indicates the extent to which you agree that the statement is true.**

①	②	③	④	⑤	⑥	⑦	
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Slightly Disagree</b>	<b>Neither Agree or Disagree</b>	<b>Slightly Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>	
59. Most of the programs that are supposed to solve problems around here will not do much good.	①	②	③	④	⑤	⑥	⑦
60. I am seriously thinking about quitting my job.	①	②	③	④	⑤	⑥	⑦
61. Plans for future improvement will not amount to much.	①	②	③	④	⑤	⑥	⑦
62. In general, I like working here.	①	②	③	④	⑤	⑥	⑦
63. If I want to, I can have input into the decisions being made about our future programs.	①	②	③	④	⑤	⑥	⑦
64. The organization is willing to extend itself in order to help me perform my job to the best of my ability.	①	②	③	④	⑤	⑥	⑦
65. All in all, I am satisfied with my job.	①	②	③	④	⑤	⑥	⑦
66. There is a clear need for ASC/PK to change our business activities.	①	②	③	④	⑤	⑥	⑦
67. Suggestions on how to solve problems will not produce much real change.	①	②	③	④	⑤	⑥	⑦
68. Even if I did the best job possible, the organization would fail to notice me.	①	②	③	④	⑤	⑥	⑦
69. In general, I don't like my job.	①	②	③	④	⑤	⑥	⑦
70. As soon as I can find a better job, I'll leave ASC/PK.	①	②	③	④	⑤	⑥	⑦
71. The organization takes pride in my accomplishments.	①	②	③	④	⑤	⑥	⑦
72. The people who know what's going on within ASC/PK do not share information with me.	①	②	③	④	⑤	⑥	⑦
73. I feel like no one ever tells me anything about what's going on around here.	①	②	③	④	⑤	⑥	⑦
74. The organization really cares about my well-being.	①	②	③	④	⑤	⑥	⑦
75. I am actively looking for a job outside of ASC/PK.	①	②	③	④	⑤	⑥	⑦

①	②	③	④	⑤	⑥	⑦
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree

76. The organization cares about my general satisfaction at work.      ① ② ③ ④ ⑤ ⑥ ⑦

77. I often think about quitting my job at ASC/PK.      ① ② ③ ④ ⑤ ⑥ ⑦

78. My performance would improve if I received more information about what's going on in ASC/PK.      ① ② ③ ④ ⑤ ⑥ ⑦

79. There is a clear vision guiding ASC/PK.      ① ② ③ ④ ⑤ ⑥ ⑦

80. The organization shows very little concern for me.      ① ② ③ ④ ⑤ ⑥ ⑦

81. I am thoroughly satisfied with the information I receive about what's going on within the ASC/PK community.      ① ② ③ ④ ⑤ ⑥ ⑦

82. Our organization has problems that need to be addressed.      ① ② ③ ④ ⑤ ⑥ ⑦

**PART III**  
**ATTITUDES ABOUT**  
**YOURSELF**

**We would like to understand how you feel about change in general. The following questions will help us do that. You should answer each statement by filling in the circle for the number that indicates the extent to which you agree that the statement is true.**

①	②	③	④	⑤	⑥	⑦
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree

83. I am reluctant about adopting new ways of doing things until I see them working for people around me.      ① ② ③ ④ ⑤ ⑥ ⑦

84. I often find myself skeptical of new ideas.      ① ② ③ ④ ⑤ ⑥ ⑦

85. I rarely trust new ideas until I can see whether the vast majority of people around me accept them.      ① ② ③ ④ ⑤ ⑥ ⑦

86. I am challenged by ambiguities and unsolved problems.      ① ② ③ ④ ⑤ ⑥ ⑦

87. I tend to feel that the old way of living and doing things is the best way.      ① ② ③ ④ ⑤ ⑥ ⑦

88. I am generally cautious about accepting new ideas.      ① ② ③ ④ ⑤ ⑥ ⑦

89. I must see other people using new innovations before I will consider them.      ① ② ③ ④ ⑤ ⑥ ⑦

①	②	③	④	⑤	⑥	⑦
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree

90. I am aware that I am usually one of the last people in my group to accept something new.      ① ② ③ ④ ⑤ ⑥ ⑦

**In this sub-section, the following scale consists of a number of words that describe different feelings and emotions. Please read each item and then fill in the circle that best reflects the way you generally feel, that is, how you feel on average concerning changes in general. Use the following scale to indicate your answers.**

①	②	③	④	⑤
Very slightly Or not at all	A little	Moderately	Quite a bit	Extremely

Interested	① ② ③ ④ ⑤	Irritable	① ② ③ ④ ⑤
Distressed	① ② ③ ④ ⑤	Alert	① ② ③ ④ ⑤
Excited	① ② ③ ④ ⑤	Ashamed	① ② ③ ④ ⑤
Upset	① ② ③ ④ ⑤	Inspired	① ② ③ ④ ⑤
Strong	① ② ③ ④ ⑤	Nervous	① ② ③ ④ ⑤
Guilty	① ② ③ ④ ⑤	Determined	① ② ③ ④ ⑤
Scared	① ② ③ ④ ⑤	Attentive	① ② ③ ④ ⑤
Hostile	① ② ③ ④ ⑤	Jittery	① ② ③ ④ ⑤
Enthusiastic	① ② ③ ④ ⑤	Active	① ② ③ ④ ⑤
Proud	① ② ③ ④ ⑤	Afraid	① ② ③ ④ ⑤

PART IV  
**BACKGROUND  
INFORMATION**

This final section contains items regarding your personal characteristics. These items are very important for statistical purposes. Respond to each item by WRITING IN THE INFORMATION requested or CHECKING THE BOX  that best describes you.

1. Describe your primary career field or profession (e.g., buyer, contracting officer, pricer, clerk, staff, etc.)? \_\_\_\_\_
2. Are you a supervisor?       **Yes (How many people do you supervise? \_\_\_\_\_)**  
     **No**
3. How many levels of management separate you from ASC/PK's Director?  
\_\_\_\_\_
4. How long have you worked for ASC/PK? \_\_\_\_\_ years \_\_\_\_\_ months
5. How long have you been in your current ASC/PK job? \_\_\_\_\_ years \_\_\_\_\_ months
6. How many years are you from retirement (estimated)? \_\_\_\_\_
7. Please indicate the highest level of education that you have attained.  
 **Some High School**  
 **High School Diploma**  
 **Associate's degree**  
 **Bachelor's degree**  
 **Master's degree**  
 **Doctorate degree**  
 **Other (please specify) \_\_\_\_\_**
8. What is your age? \_\_\_\_\_ years
9. What is your gender?  
     **Male**       **Female**
10. Are you currently civilian or military?  
     **Civilian - Prior military? (Yes or No) \_\_\_\_\_**  
     **Military – Rank \_\_\_\_\_**

**PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ABOUT KNOWLEDGE  
SHARING & OTHER CHANGES ON THE BACK OF THESE PAGES**

**Thank you for your participation!**

## Appendix C – Raw Data Collected From Survey

### Change Content – Semantic Differential Scale

CodeID	Positive2Negative [R]						
	CCVsd	CCVsd	CCVsd	CCVsd	CCVsd	CCVsd	CCVsd
EN90ER11	4	5	5	5	5	5	5
ER58ON01							
MS41EY07	2	2	5	5	4	4	
LE24SO01	2	2	6	5	5	3	
ER00EN11							
LL91TH12							
ER15AN02							
LE23ER11	1	2	7	6	6	2	
ME19ES05							
DS55RN04	2	2	6	6	6	2	
ER55CE03	1	2	6	6	6	1	
FT69ER02	1	2	7	6	6	1	
AR29LE03							
WI57KE01	4	4	4	4	4	4	
LL61KE12							
AR46RN06	2	2	4	6	6	2	
LY92ER09	2	1	6	6	6	2	
TH01IN02	2	2	6	6	6	2	
NN02IS09	2	2	3	3	5	3	
	2	1	6	5	6	2	
NS39MS03	1	1	7	7	7	1	
ER03ON10	2	2	7	6	2	5	
ER10ER02	2	2	6	6	2	6	
OD16TT11							
TH49GE01	1	1	1	4	2	1	
BA17TT10	4	1	3	4	5	5	
MA41AD07							
TH35ER05	2	2	6	4	6	2	
LE68ER11	2	2	6	4	4	2	
HU26TS06	2	2	6	4	6	2	
IS42IS10							
	2	2	7	6	6	1	

CodeID	Positive2Negative [R]		Worthless2Valuable		Ineffective2Effective	
	Good	Bad	Good	Bad	Good	Bad
ER97ST11	2	2	7	6	6	2
ON63NS02						
PP41IS05	2	3	4	5	5	2
MI63EN02	2	2	6	4	2	2
NG42ON04	2	2	6	5	6	2
VE84EL05	4	5	4	1	4	4
RT07ER09						
RY26ON05	2	2	6	4	5	6
EY27EP02						
MS62LD08	1	1	7	7	7	1
NE45US03	1	1	7	7	7	1
ER35ER05	2	2	6	6	6	2
RY16AU12	4	3	4	4	5	3
JO54EN02						
WE48RK08						
RS27RT01						
GH95OR12						
TT20LA06						
AN34CE07	1	2				
AN46TT10						
EY51HI09	2	2	5	6	6	2
WO80CH01	1	1	7	6	6	1
UM37ER11	6	6	3	1	1	6
IS75ER06	2	3	6	5	5	6
BB30ER04	4	4	4	6	7	4
AN33LT07	1	1	7	6	6	1
CM01ON01	1	1	7	7	7	1
NS30CK08	2	2	6	5	6	2
EU12ER02	2	2	7	6	6	6
SU77EE03	1	1	7	3	7	1
ER50ER07						
LS58IZ08	4	4	4	3	3	4
RO53KI08						
RE46CK09	3	2	6	6	5	7
AD38ER10	2	2	4	4	4	2

CodeID	Positive2Negative [R]	3
DA22NK05	2	5
KR04EN04	4	5
RA20GR06	1	6
ZE56CE11	6	6
AN97RT07	1	7
JU46TT10	4	5
LS99LL07	1	7
NS46ND09	1	7
KI89ER12	1	7
AK12KY07	1	6
WN97AN05	2	6
ON89EL11	4	4
BA31DR12	2	5
ER14NS11	1	7
OR23ER03	2	4
IN14CH07	2	2
BS61ER02	2	6
LK46LK03	1	6
CE46RA09	2	3
TH79TH08	4	4
WN45ER12	5	1
RO69NO12	4	4
HA27HU11	1	7
FF85RY01	2	6
LL07GE07	2	6
NR50KR05	1	7
OP51BS10	1	6
ER43ER01	6	2
ER03ER07	2	7
SI58GH05	2	4
ST39LL06	1	7
NZ61EZ06	2	6
IS91LE03	1	7
ER46CK07	1	5
TH95TE11	2	6
CE30RY07	2	6
PP76ER09	1	3
ON53TE11	4	4

	Positive2Negative [R]					
CodeID	2	3	5	6	5	2
EN59BE01	2	3	5	6	5	2
TH39IS04	1	1	7	7	7	1
TO72KE09	3	3	3	4	4	4
NE37TZ10	2	4	5	6	6	2
ES96RS09	2	2	4	6	6	2
KI89PA01	2	2	6	6	6	2
RI92EN11	1	1	7	7	7	1
JO39HL10	2	3	6	6	6	2
SI07CI08	3	4	5	4	3	5
OX89MS10	1	2	6	6	6	2
YD68TH09	2	1	6	6	7	1
BA31AN08	2	5	5	6	6	2
ST89AM11	4	4	4	4	4	4
MS62LD08	1	1	7	7	7	1
IS08TS05	1	1	7	7	7	1
AN67AL11	1	1	6	6	6	2
ER35ER05	1	1	7	6	7	1
SH02EY04	2	2	6	6	6	2
LY13IN09	4	3	3	5	6	7
RU43BU02	3	4	3	3	5	4
EM58ER09	1	1	6	6	7	2
AN70TH03	2	2	6	6	6	2
OX59LL12	2	2	4	4	4	2
ER82SH04	2	3	6	5	5	2
US22RD02	4	3	4	6	4	3
RS94SH05	2	2	6	4	6	2
US59ER11	3	3	5	6	5	2
BO20LL09	1	1	1	1	1	1
ER53LL10	1	2	5	6	6	2
KL02US10	4	4	4	4	4	4
RL49LS06	2	2	6	4	4	5
US67LL06	5	3	6	5	2	5
OW56RE12	1	1	7	7	7	1
RS27RT01	2	2	7	6	6	2
EK59OD06	2	3	6	5	5	2
ER03ER10	1	1	6	6	7	1
HA07ER09	4	4	4	4	4	4

## Change Content – Appropriateness

CodeID	Q6 [R]	Q8	Q12	Q16	Q26	Q35	Q37	Q47	Q49 [R]	Q54 [R]
EN90ER11	2	6	6	5	6	6	6	6	4	2
ER58ON01	2	6	6	6	6	6	6	6	1	2
MS41EY07	4	5	5	2	2	4	7	6	3	2
LE24SO01	3	6	6	5	5	6	5	5	2	2
ER00EN11	4	5	2	5	4	4	5	5	3	5
LL91TH12	3	6	5	5	4	4	5	5	2	3
ER15AN02	4	6	3	5	6	3	4	3	3	4
LE23ER11	2	6	6	2	6	2	6	6	2	3
ME19ES05	3	6	7	6	6	5	5	6	2	3
DS55RN04	2	6	6	6	6	4	6	6	3	3
ER55CE03	2	6	6	3	6	5	6	6	2	2
FT69ER02	2	6	6	7	7	6	6	6	2	2
AR29LE03	2	6	4	6	3	3	5	5	3	3
WI57KE01	3	6	5	4	4	5	4	4	4	4
LL61KE12	3	5	5	5	5	5	5	4	4	3
AR46RN06	3	6	6	6	5	4	6	6	2	1
LY92ER09	4	5	6	6	5	6	5	5	2	5
TH01IN02	1	6	6	6	6	4	6	6	2	2
	6	5	5	5	5	3	4	4	4	4
NN02IS09	4	5	5	5	5	4	6	4	3	3
	2	5	5	6	5	5	5	6	2	2
NS39MS03	1	6	7	7	5	4	7	7	1	2
ER03ON10	3	6	6	5	5	5	6	6	2	2
ER10ER02	3	6	7	6	6	3	6	6	1	3
OD16TT11	5	6	6	6	6	6	6	6	2	2
TH49GE01	4	4	6	6	6	4	5	4	3	3
BA17TT10	3	6	7	6	5	5	5	5	2	5
MA41AD07	4	6	6	6	6	5	6	6	2	2
TH35ER05	3	6	6	5	5	4	5	4	3	3
LE68ER11	4	5	5	6	7	4	5	3	1	
HU26TS06	3	6	6	6	6	6	5	6	2	2
IS42IS10	4	6	6	4	4	4	6	4	4	2
	3	6	6	6	6	5	5	5	2	3
ER97ST11	2	7	7	6	6	6	7	6	2	6
ON63NS02	2	6	6	5	5	4	4	4	4	4
PP41IS05	4	6	6	6	5	6	6	6	3	3
MI63EN02	2	6	6	5	6	5	5	6	1	2
NG42ON04	2	6	7	6	7	6	7	6	2	2
VE84EL05	3	4	5	6	5	4	5	5	4	4
RT07ER09	2	6	7	5	6	5	6	6	2	2
RY26ON05	4	6	6	5	5	4	7	6	2	2
EY27EP02	3	5	6	5	5	4	4	5	3	4
MS62LD08	2	7	7	7	7	7	7	7	1	1

CodeID	Q6 [R]	Q8	Q12	Q16	Q26	Q35	Q37	Q47	Q49 [R]	Q54 [R]
NE45US03	5	6	6	6	6	6	6	6	2	2
ER35ER05	2	6	6	6	6	6	6	6	2	2
RY16AU12	4	4	4	5	5	4	4	5	4	4
JO54EN02	3	5	5	4	4	5	4	4	3	3
WE48RK08	1	7	6	7	7	6	6	7	2	2
	6	6	6	5	5	4	4	4	3	4
RS27RT01	2	6	7	7	6	3	6	6	1	1
GH95OR12	2	7	6	5	5	5	6	6	2	2
TT20LA06	3	5	5	5	5	6	6	5	2	3
AN34CE07	5	6	6	7	6	6	7	7	1	3
	4	6	6	4	6	4	4	4	3	3
AN46TT10	2	6	7	7	4	4	6	4	2	2
EY51HI09	3	6	6	6	4	6	6	5	2	3
WO80CH01	5	5	5	5	4	4	4	4	4	3
	3	7	7	7	6	5	6	4	1	1
UM37ER11	6	5	4	1	1	1	3	2	2	6
IS75ER06	3	6	6	6	6	6	6	6	2	2
BB30ER04	4	6	6	6	4	6	7	6	2	2
AN33LT07	2	6	6	6	6	6	6	6	2	2
CM01ON01	3	6	6	6	6	6	7	6	2	2
NS30CK08	4	6	5	5	6	4	5	5	3	3
EU12ER02	2	6	6	6	6	4	6	6	2	2
SU77EE03	1	7	7	7	5	3	6	7	1	1
ER50ER07	3	7	6	5	3	4	4	4	2	2
LS58IZ08	6	5	6	3	4	4	4	3	3	2
RO53KI08	1	7	7	7	7	1	7	7	4	1
RE46CK09	1	6	6	6	5	3	6			
AD38ER10										
DA22NK05	5	4	3	5	1	5	6	7	7	3
KR04EN04	1	7	7	7	6	6	6	6	1	1
RA20GR06	2	6	6	6	6	6	6	6	2	3
ZE56CE11										
AN97RT07	4	6	6	4	6	4	6			
JU46TT10	2	5	6	5	6	4	5	5	2	3
LS99LL07	1	7	7	7	7	7	7	7	1	1
NS46ND09	2	7	7	7	7	5	7	7	1	1
KI89ER12	3	7	7	7	7	7	7	7	2	2
AK12KY07	4	5	5	4	4	4	4	5	4	5
WN97AN05										
ON89EL11										
BA31DR12										
ER14NS11	2	6	7	6						
OR23ER03										
IN14CH07	2	6	5	5	6	5	6	6	2	2
BS61ER02										

CodeID	Q6 [R]	Q8	Q12	Q16	Q26	Q35	Q37	Q47	Q49 [R]	Q54 [R]
LK46LK03	2	7	6	7	7	6	6	6	2	3
CE46RA09	3	5	6	5	5	4	5	6	3	3
TH79TH08	3	6	6	7	6	2	6	6	2	2
WN45ER12	7	1	1	1	1	1	3	1	4	7
RO69NO12										
HA27HU11	1	7	7	7	7	7	7	7	1	1
FF85RY01	2	6	6	5	5	5	5	6	2	5
LL07GE07	2	6	6	6	5	3	4	6	2	2
NR50KR05	2	7	7	7						
OP51BS10										
ER43ER01	6	4	5	2	1	3	4	2	4	4
ER03ER07										
SI58GH05										
ST39LL06	1	6	7	7	7	4	7	7	1	1
NZ61EZ06	2	6	6	6	6	5	6	6	2	2
IS91LE03	1	7	7	7	7	7	7	7	1	1
ER46CK07	6	5	5	2	1	4	6	5	2	6
TH95TE11	3	6	6	6	5	4	5	6	3	3
CE30RY07	2	7	7	7	7	6	6	6	1	2
PP76ER09	5	4	3	3						
ON53TE11										
EN59BE01	6	5	5	5						
TH39IS04	4	6	6	6	6	4	4			
TO72KE09	3	5	4	5	4	5	5	4	3	4
NE37TZ10	3	6	5	6	4	5	5	7	4	4
ES96RS09										
KI89PA01	4	5	5	6	7	5	5	5	2	2
RI92EN11	1	7	7	7	7	6	7	7	1	1
JO39HL10										
SI07CI08										
OX89MS10	2	6	7	7	6	5	7	5	2	2
YD68TH09	2	7	7	5	7	5	5	6	2	2
BA31AN08	2	5	6	5	5	6	6	6	1	2
ST89AM11										
MS62LD08	2	7	7	7	7	7	7	6	2	2
IS08TS05	2	5	7	6	5	5	6	6	2	2
AN67AL11	3	5	6	6	5	4	5	5	2	4
ER35ER05	2	6	6	6	6	6	5	6	2	2
SH02EY04	3	5	5	5	4	4	5	5	4	3
LY13IN09	4	5	6	6	7	4	6	4	4	2
RU43BU02	6	5	4	4	5	5	4	4	3	3
EM58ER09	2	6	6	6	5	6	6	5	2	2
AN70TH03	2	6	6	5	6	4	6	6	1	1
OX59LL12	2	5	5	5	6	2	6	5	2	4
ER82SH04	3	5	6	5	5	5	5	5	2	3

CodeID	Q6 [R]	Q8	Q12	Q16	Q26	Q35	Q37	Q47	Q49 [R]	Q54 [R]
US22RD02	3	5	5	5	5	3	5	5	3	3
RS94SH05	2	6	6	5	5	4	5	5	2	4
US59ER11	3	6	5	5	5	5	5	5	2	2
BO20LL09	3	5	5	5	4	4	5	4	4	4
ER53LL10	2	7	6	6	6	4	6	6	1	2
KL02US10	5	6	5	6	5	5	5	5	3	3
RL49LS06	1	6	5	6	3	5	6	4	4	4
US67LL06										
OW56RE12	5	6	5	5	6	5	5	7	1	1
RS27RT01	1	7	6	7	6	6	7	6	1	1
EK59OD06										
ER03ER10	3	6	6	6	5	4	6	5	2	2
	2	6	6	6	6	6	6	6	2	2

### Change Content – Personal Valence

CodeID	Q3	Q11 [R]	Q13	Q19 [R]	Q25	Q50 [R]
EN90ER11	6	1	6	5	6	5
ER58ON01	5	1	5	2	4	1
MS41EY07	5	2	4	2	3	2
LE24SO01	5	2	5	2	2	2
ER00EN11	3	2	2	2	2	3
LL91TH12	5	4	5	4	2	4
ER15AN02	6	2	5	2	4	2
LE23ER11	4	4	4	4	2	4
ME19ES05	5	1	5	2	3	3
DS55RN04	4	2	4	2	4	2
ER55CE03	5	3	6	3	3	2
FT69ER02	7	2	6	2	4	2
AR29LE03	3	2	4	3	1	3
WI57KE01	3	4	4	3	2	4
LL61KE12	3	3	4	3	4	4
AR46RN06	4	4	4	2	4	2
LY92ER09	5	2	4	2	6	2
TH01IN02	5	2	6	1	4	2
	4	4	5	2	2	3
NN02IS09	6	5	5	1	2	3
	3	3	5	2	4	3
NS39MS03	7	1	7	1	2	1
ER03ON10	4	5	2	2	2	2
ER10ER02	6	1	7	1	2	1
OD16TT11	5	2	5	2	4	2
TH49GE01	4	2	6	4	4	4
BA17TT10	3	2	5	2	6	2
MA41AD07	3	2	5	2	4	3
TH35ER05	5	1	4	2	4	2
LE68ER11	4	2	4	4	4	4
HU26TS06	6	1	6	6	7	4
IS42IS10	6	2	5	2	4	4
	5	2	4	2	4	2
ER97ST11	5	1	6	2	4	2
ON63NS02	5	2	6	2	4	4
PP41IS05	4	2	5	2	5	3
MI63EN02	6	3	5	2	4	2
NG42ON04	4	3	5	3	5	2
VE84EL05	5	4	1	2	1	4
RT07ER09	7	2	5	2	4	2
RY26ON05	6	1	6	1	6	1
EY27EP02	3	5	2	2	2	4
MS62LD08	7	6	5	2	7	2
NE45US03	6	4	5	2	6	2

CodeID	Q3	Q11 [R]	Q13	Q19 [R]	Q25	Q50 [R]
ER35ER05	6	1	6	2	5	2
RY16AU12	4	5	4	3	4	4
JO54EN02	5	3	3	3	3	3
WE48RK08	6	2	5	1	4	2
	4	4	5	4	4	4
RS27RT01	6	2	7	1	6	1
GH95OR12	5	1	5	2	3	1
TT20LA06	4	2	5	1	4	2
AN34CE07	5	2	6	2	4	2
	6	2	4	2	4	3
AN46TT10	6	4	5	2	4	2
EY51HI09	3	6	5	2	4	2
WO80CH01	4	4	4	2	4	4
	4	4	6	1	4	4
UM37ER11	3	6	5	2	1	6
IS75ER06	5	2	5	2	4	1
BB30ER04	3	3	3	2	2	2
AN33LT07	5	2	4	2	5	2
CM01ON01	6	5	6	2	3	2
NS30CK08	3	2	2	7	5	3
EU12ER02	6	3	6	2	3	2
SU77EE03	5	3	7	1	3	1
ER50ER07	2	2	4	2	1	4
LS58IZ08	2	2	2	2	2	2
RO53KI08	7	1	7	1	1	4
RE46CK09	6	2	5	2	5	
AD38ER10						
DA22NK05	2	3	3	1	7	1
KR04EN04	6	7	6	1	2	1
RA20GR06	6	3	6	1	3	2
ZE56CE11						
AN97RT07	7	3	4	4	4	
JU46TT10	2	2	4	2	4	2
LS99LL07	7	4	7	7	4	2
NS46ND09	6	2	6	1	5	7
KI89ER12	7	2	5	1	4	2
AK12KY07	5	3	5	3	5	3
WN97AN05						
ON89EL11						
BA31DR12						
ER14NS11	6	2	4	1		
OR23ER03						
IN14CH07	5	4	3	1	2	2
BS61ER02						
LK46LK03	5	5	5	4	2	2
CE46RA09	4	3	5	2	4	3

CodeID	Q3	Q11 [R]	Q13	Q19 [R]	Q25	Q50 [R]
TH79TH08	6	2	3	1	6	2
WN45ER12	1	2	1	1	1	1
RO69NO12						
HA27HU11	7	1	6	1	4	1
FF85RY01	6	2	6	2	3	3
LL07GE07	4	2	6	2	3	2
NR50KR05	7	1	7	2		
OP51BS10						
ER43ER01	2	5	1	4	1	3
ER03ER07						
SI58GH05						
ST39LL06	6	4	7	1	4	1
NZ61EZ06	6	2	6	2	5	2
IS91LE03	6	1	7	1	5	1
ER46CK07	3	2	2	2	2	2
TH95TE11	5	3	5	5	3	4
CE30RY07	4	1	6	1	6	2
PP76ER09	4	4	3	4		
ON53TE11						
EN59BE01	2	2	4	2		
TH39IS04	4	2	4	2	5	
TO72KE09	4	4	4	4	4	3
NE37TZ10	3	4	4	1	4	4
ES96RS09						
KI89PA01	5	3	5	2	2	2
RI92EN11	5	1	7	1	3	1
JO39HL10						
SI07CI08						
OX89MS10	6	2	6	2	4	2
YD68TH09	7	2	5	2	2	2
BA31AN08	6	2	5	2	5	1
ST89AM11						
MS62LD08	6	2	7	2	4	2
IS08TS05	7	1	3	2	4	1
AN67AL11	6	2	6	3	5	4
ER35ER05	6	2	4	2	6	2
SH02EY04	2	4	3	3	3	4
LY13IN09	6	2	6	4	6	4
RU43BU02	5	2	4	1	2	2
EM58ER09	6	1	5	1	3	2
AN70TH03	4	1	5	3	3	2
OX59LL12	4	4	2	2	2	6
ER82SH04	5	2	4	3	5	3
US22RD02	4	3	5	3	4	3
RS94SH05	4	2	4	2	4	4
US59ER11	5	2	5	2	4	2

CodeID	Q3	Q11 [R]	Q13	Q19 [R]	Q25	Q50 [R]
BO20LL09	7	3	4	3	4	5
ER53LL10	6	2	4	1	2	6
KL02US10	6	3	5	2	2	2
RL49LS06	4	4	5	3	5	4
US67LL06						
OW56RE12	6	1	4	1	4	1
RS27RT01	6	1	5	1	5	1
EK59OD06						
ER03ER10	5	2	4	5	4	2
HA07ER09	6	2	6	2	5	2

## Process – Management Support

CodeID	Q4 [R]	Q23	Q34	Q36	Q38
EN90ER11	1	5	6	6	6
ER58ON01	1	6	6	6	7
MS41EY07	4	2	2	4	4
LE24SO01	4	2	2	2	4
ER00EN11	5	4	5	3	4
LL91TH12	2	3	5	5	6
ER15AN02	4	3	3	3	4
LE23ER11	4	4	4	4	4
ME19ES05	4	3	5	3	5
DS55RN04	2	3	3	4	5
ER55CE03	6	3	5	5	6
FT69ER02	2	5	6	5	6
AR29LE03	6	5	6	6	4
WI57KE01	4	5	5	5	6
LL61KE12	4	3	4	3	4
AR46RN06	4	4	4	4	4
LY92ER09	4	2	2	2	4
TH01IN02	2	5	5	4	5
	6	4	6	3	4
NN02IS09	2	2	4	2	4
	5	4	6	4	5
NS39MS03	3	1	1	1	4
ER03ON10	5	2	2	3	4
ER10ER02	2	5	5	5	6
OD16TT11	3	5	6	6	6
TH49GE01	6	2	3	3	4
BA17TT10	7	1	5	5	6
MA41AD07	3	4	5	5	6
TH35ER05	2	2	3	3	4
LE68ER11	4	2	4	4	4
HU26TS06	2	6	6	6	5
IS42IS10	4	4	5	4	6
	4	4	4	4	5
ER97ST11	4	5	5	4	4
ON63NS02	3	4	4	4	4
PP41IS05	5	5	5	5	5
MI63EN02	3	3	4	5	5
NG42ON04	4	4	4	5	4
VE84EL05	4	1	1	1	4
RT07ER09	2	5	7	6	6
RY26ON05	4	4	5	5	6
EY27EP02	5	2	2	5	2
MS62LD08	2	7	7	6	7
NE45US03	5	5	5	5	6
ER35ER05	2	6	6	5	6

CodeID	Q4 [R]	Q23	Q34	Q36	Q38
RY16AU12	4	3	4	3	4
JO54EN02	3	3	4	4	4
WE48RK08	3	2	4	4	7
	5	2	3	3	4
RS27RT01	4	4	6	1	7
GH95OR12	2	4	6	4	4
TT20LA06	2	5	5	6	6
AN34CE07	4	4	6	5	6
	2	2	2	2	4
AN46TT10	4	2	4	4	4
EY51HI09	3	5	5	5	5
WO80CH01	4	4	4	4	4
	4	2	2	2	4
UM37ER11	6	3	3	4	6
IS75ER06	3	5	6	6	6
BB30ER04	5	4	5	6	6
AN33LT07	5	4	4	6	4
CM01ON01	4	6	6	6	6
NS30CK08	6	5	3	2	3
EU12ER02	2	2	3	2	3
SU77EE03	7	5	5	3	6
ER50ER07	6	1	2	1	4
LS58IZ08	4	3	3	3	4
RO53KI08	4	4	4	1	1
RE46CK09	4	5	4	3	7
AD38ER10					
DA22NK05	6	7	3	6	5
KR04EN04	1	2	7	2	7
RA20GR06	3	3	5	5	6
ZE56CE11					
AN97RT07	5	4	4	5	6
JU46TT10	4	4	4	4	4
LS99LL07	5	2	5	3	5
NS46ND09	3	2	5	5	7
KI89ER12	1	6	7	7	7
AK12KY07	4	3	3	4	4
WN97AN05					
ON89EL11					
BA31DR12					
ER14NS11	4				
OR23ER03					
IN14CH07	6	3	5	2	4
BS61ER02					
LK46LK03	3	5	6	6	6
CE46RA09	3	3	5	5	6
TH79TH08	6	2	3	2	4
WN45ER12	3	1	1	1	4

CodeID	Q4 [R]	Q23	Q34	Q36	Q38
RO69NO12					
HA27HU11	4	4	7	4	4
FF85RY01	4	4	4	4	4
LL07GE07	3	4	4	3	4
NR50KR05	2				
OP51BS10					
ER43ER01	1	1	1	1	1
ER03ER07					
SI58GH05					
ST39LL06	4	1	4	4	4
NZ61EZ06	3	3	5	5	5
IS91LE03	2	5	7	5	4
ER46CK07	7	1	2	2	4
TH95TE11	5	4	4	4	4
CE30RY07	2	5	6	6	6
PP76ER09	3				
ON53TE11					
EN59BE01	5				
TH39IS04	4	4	5	4	4
TO72KE09	5	3	5	5	4
NE37TZ10	4	4	4	4	5
ES96RS09					
KI89PA01	4	2	5	4	4
RI92EN11	2	6	6	6	7
JO39HL10					
SI07CI08					
OX89MS10	2	5	6	5	7
YD68TH09	2	4	6	4	6
BA31AN08	3	3	5	6	6
ST89AM11					
MS62LD08	3	3	7	6	6
IS08TS05	2	4	5	6	6
AN67AL11	4	1	1	1	4
ER35ER05	2	6	6	5	6
SH02EY04	4	4	4	3	4
LY13IN09	4	4	7	4	4
RU43BU02	4	5	5	5	5
EM58ER09	2	5	5	6	7
AN70TH03	6	6	6	6	4
OX59LL12	2	2	3	2	4
ER82SH04	4	6	6	5	5
US22RD02	3	2	4	4	5
RS94SH05	4	4	4	4	4
US59ER11	4	3	4	4	4
BO20LL09	4	4	5	5	4
ER53LL10	5	1	2	3	3
KL02US10	4	6	6	6	6

CodeID	Q4 [R]	Q23	Q34	Q36	Q38
RL49LS06	4	1	1	1	1
US67LL06					
OW56RE12	4	2	4	4	5
RS27RT01	1	5	6	6	7
EK59OD06					
ER03ER10	2	2	4	4	4
HA07ER09	2	5	6	5	6

## Process – Participation

CodeID	Q27	Q29	Q55	Q63
EN90ER11	5	6	4	5
ER58ON01	6	6	6	4
MS41EY07	5	5	3	2
LE24SO01	2	4	2	5
ER00EN11	3	5	3	2
LL91TH12	2	6	5	4
ER15AN02	5	5	3	5
LE23ER11	4	6	5	2
ME19ES05	3	4	4	5
DS55RN04	2	4	6	2
ER55CE03	5	4	6	5
FT69ER02	5	6	6	6
AR29LE03	3	4	3	1
WI57KE01	2	4	4	2
LL61KE12	4	4	4	6
AR46RN06	3	4	4	4
LY92ER09	5	4	3	6
TH01IN02	4	4	6	4
	3	4	2	2
NN02IS09	3	5	5	3
	4	4	4	5
NS39MS03	1	1	1	1
ER03ON10	2	5	3	2
ER10ER02	5	6	5	6
OD16TT11	6	6	3	5
TH49GE01	3	4	4	2
BA17TT10	3	5	4	2
MA41AD07	4	5	5	5
TH35ER05	4	5	4	3
LE68ER11	4	5		3
HU26TS06	4	6	6	4
IS42IS10	5	6	4	5
	3	6	4	5
ER97ST11	6	5	5	3
ON63NS02	2	4	4	3
PP41IS05	4	5	4	5
MI63EN02	2	6	4	4
NG42ON04	3	6	5	5
VE84EL05	5	4	3	2
RT07ER09	5	6	6	5
RY26ON05	2	4	4	5
EY27EP02	2	6	5	3

CodeID	Q27	Q29	Q55	Q63
MS62LD08	3	6	6	6
NE45US03	3	4	5	2
ER35ER05	5	6	6	5
RY16AU12	4	4	5	5
JO54EN02	3	4	4	2
WE48RK08	6	6	6	6
	2	5	4	2
RS27RT01	4	6	4	6
GH95OR12		5	3	4
TT20LA06	2	5	5	5
AN34CE07	6	6	6	6
	2	3	3	4
AN46TT10	5	4	4	7
EY51HI09	3	6	5	5
WO80CH01	4	5	5	4
	1	4	4	4
UM37ER11	1	1	1	1
IS75ER06	5	7	5	6
BB30ER04	1	4	5	2
AN33LT07	2	4	5	6
CM01ON01	6	7	6	6
NS30CK08	3	5	4	3
EU12ER02	1	1	3	3
SU77EE03	3	3	3	2
ER50ER07	1	4	1	2
LS58IZ08	5	6	4	3
RO53KI08	1	4	1	1
RE46CK09	2	5		
AD38ER10				
DA22NK05	1	7	4	5
KR04EN04	2	7	6	5
RA20GR06	3	4	5	2
ZE56CE11				
AN97RT07	4	6		
JU46TT10	5	4	5	7
LS99LL07	6	7	1	6
NS46ND09	5	7	7	7
KI89ER12	5	6	7	5
AK12KY07	4	5	4	4
WN97AN05				
ON89EL11				
BA31DR12				
ER14NS11				
OR23ER03				

CodeID	Q27	Q29	Q55	Q63
IN14CH07	6	6	6	7
BS61ER02				
LK46LK03	4	5	5	3
CE46RA09	3	3	4	5
TH79TH08	4	2	2	2
WN45ER12	1	1	1	1
RO69NO12				
HA27HU11	6	5	7	1
FF85RY01	4	5	2	2
LL07GE07	6	5	3	5
NR50KR05				
OP51BS10				
ER43ER01	1	1	1	6
ER03ER07				
SI58GH05				
ST39LL06	1	4	4	4
NZ61EZ06	3	5	5	5
IS91LE03	4	7	7	7
ER46CK07	2	2	4	1
TH95TE11	3	4	5	3
CE30RY07	3	5	6	3
PP76ER09				
ON53TE11				
EN59BE01				
TH39IS04	4	4		
TO72KE09	2	5	3	1
NE37TZ10	4	2	4	5
ES96RS09				
KI89PA01	4	5	4	4
RI92EN11	5	6	6	5
JO39HL10				
SI07CI08				
OX89MS10	2	5	6	5
YD68TH09	5	4	7	5
BA31AN08	5	4	5	5
ST89AM11				
MS62LD08	5	7	6	6
IS08TS05	4	5	4	5
AN67AL11	4	3	2	4
ER35ER05	5	6	5	5
SH02EY04	4	4	3	3
LY13IN09	4	5	5	3
RU43BU02	2	4	5	5
EM58ER09	5	6	6	6

CodeID	Q27	Q29	Q55	Q63
AN70TH03	4	5	5	4
OX59LL12	4	4	3	1
ER82SH04	4	5	4	4
US22RD02	5	4	5	6
RS94SH05	4	4	4	4
US59ER11	5	5	4	5
BO20LL09	4	4	4	4
ER53LL10	4	3	2	2
KL02US10	2	5	3	2
RL49LS06	1	1	4	1
US67LL06				
OW56RE12	4	5	6	6
RS27RT01	4	6	6	6
EK59OD06				
ER03ER10	2	5	6	5
HA07ER09	5	6	6	

## Process – Communication Climate

CodeID	Q72 [R]	Q73 [R]	Q78 [R]	Q81
EN90ER11	2	4	4	5
ER58ON01	3	3	4	3
MS41EY07	7	7	7	2
LE24SO01	5	5	3	3
ER00EN11	5	5	5	3
LL91TH12	2	2	2	5
ER15AN02	3	2	3	5
LE23ER11	2	2	4	6
ME19ES05	5	3	5	3
DS55RN04	2	2	4	6
ER55CE03	2	3	3	5
FT69ER02	2	2	2	6
AR29LE03	5	5	3	6
WI57KE01	4	4	4	4
LL61KE12	3	2	2	5
AR46RN06	2	2	5	4
LY92ER09	3	2	5	3
TH01IN02	5	5	4	2
	6	4	3	3
NN02IS09	4	3	3	3
	1	2	6	2
NS39MS03	6	7	6	2
ER03ON10	6	5	4	2
ER10ER02	3	2	2	5
OD16TT11	2	2	6	6
TH49GE01	6	6	5	1
BA17TT10	4	4	2	3
MA41AD07	3	3	2	5
TH35ER05	6	6	5	3
LE68ER11	4	5	1	2
HU26TS06	2	2	2	6
IS42IS10	4	2	2	5
	4	3	3	4
ER97ST11	5	2	5	3
ON63NS02	4	3	4	4
PP41IS05	3	3	5	5
MI63EN02	4	4	3	3
NG42ON04	4	3	2	6
VE84EL05	4	5	4	2
RT07ER09	2	2	2	6
RY26ON05	6	5	6	3
EY27EP02	3	3	5	3

CodeID	Q72 [R]	Q73 [R]	Q78 [R]	Q81
MS62LD08	2	1	6	5
NE45US03	3	3	3	3
ER35ER05	2	2	2	6
RY16AU12	4	4	3	4
JO54EN02	4	4	5	3
WE48RK08	2	2	5	4
	5	5	4	3
RS27RT01	7	7	2	6
GH95OR12	3	3	6	3
TT20LA06	1	1	3	3
AN34CE07	2	2	3	6
	5	2	5	2
AN46TT10	4	1	2	5
EY51HI09	3	3	2	5
WO80CH01	4	4	2	4
	7	7	6	1
UM37ER11	7	7	7	1
IS75ER06	2	2	2	6
BB30ER04	3	2	2	4
AN33LT07	3	2	2	4
CM01ON01	2	1	6	6
NS30CK08	5	5	5	3
EU12ER02	6	6	5	2
SU77EE03	6	3	2	3
ER50ER07	5	3	1	2
LS58IZ08	4	2	6	4
RO53KI08	7	7	1	1
RE46CK09				
AD38ER10				
DA22NK05	4	6	5	7
KR04EN04	1	1	1	7
RA20GR06	5	5	3	3
ZE56CE11				
AN97RT07				
JU46TT10	5	2	1	5
LS99LL07	2	2	7	4
NS46ND09	1	1	7	6
KI89ER12	1	1	2	7
AK12KY07	4	4	5	4
WN97AN05				
ON89EL11				
BA31DR12				
ER14NS11				
OR23ER03				

CodeID	Q72 [R]	Q73 [R]	Q78 [R]	Q81
IN14CH07	2	1	4	5
BS61ER02				
LK46LK03	3	3	5	3
CE46RA09	3	2	3	3
TH79TH08	4	4	6	3
WN45ER12	7	7	7	1
RO69NO12				
HA27HU11	7	7	1	2
FF85RY01	4	3	2	3
LL07GE07	2	2	3	3
NR50KR05				
OP51BS10				
ER43ER01	7	7	5	1
ER03ER07				
SI58GH05				
ST39LL06	4	4	4	2
NZ61EZ06	3	2	6	5
IS91LE03	4	3	6	6
ER46CK07	6	6	5	2
TH95TE11	5	5	5	3
CE30RY07	5	3	5	3
PP76ER09				
ON53TE11				
EN59BE01				
TH39IS04				
TO72KE09	5	5	5	3
NE37TZ10	4	2	4	7
ES96RS09				
KI89PA01	3	3	2	5
RI92EN11	1	3	1	5
JO39HL10				
SI07CI08				
OX89MS10	3	1	3	5
YD68TH09	2	2	4	5
BA31AN08	2	1	2	5
ST89AM11				
MS62LD08	2	1	7	5
IS08TS05	3	2	5	3
AN67AL11	7	5	4	2
ER35ER05	2	2	2	5
SH02EY04	5	4	3	4
LY13IN09	4	5	5	5
RU43BU02	3	2	3	3
EM58ER09	2	2	2	6

CodeID	Q72 [R]	Q73 [R]	Q78 [R]	Q81
AN70TH03	4	4	5	3
OX59LL12	7	7	7	1
ER82SH04	4	5	3	5
US22RD02	3	3	4	5
RS94SH05	5	6	3	4
US59ER11	3	4	3	3
BO20LL09	3	3	4	4
ER53LL10	6	5	5	4
KL02US10	3	2	2	5
RL49LS06	6	5	5	3
US67LL06				
OW56RE12	2	2	2	5
RS27RT01	4	4	4	5
EK59OD06				
ER03ER10	5	2	4	3
HA07ER09				

## Process – Quality of Information

CodeID	Q17	Q21	Q51
EN90ER11	5	5	6
ER58ON01	6	6	5
MS41EY07	2	1	2
LE24SO01	5	3	2
ER00EN11	5	2	2
LL91TH12	5	4	4
ER15AN02	5	5	4
LE23ER11	6	5	4
ME19ES05	4	1	2
DS55RN04	4	3	4
ER55CE03	5	3	5
FT69ER02	6	5	5
AR29LE03	5	5	2
WI57KE01	4	3	3
LL61KE12	3	2	4
AR46RN06	4	4	4
LY92ER09	4	2	2
TH01IN02	4	4	4
	4	4	3
NN02IS09	4	4	1
	4	4	4
NS39MS03	1	1	1
ER03ON10	3	2	3
ER10ER02	6	4	5
OD16TT11	6	6	6
TH49GE01	1	2	2
BA17TT10	4	2	4
MA41AD07	4	5	6
TH35ER05	2	2	1
LE68ER11	7	5	1
HU26TS06	6	4	6
IS42IS10	5	6	4
	4	4	3
ER97ST11	6	4	3
ON63NS02	5	4	4
PP41IS05	4	3	4
MI63EN02	4	4	4
NG42ON04	4	4	4
VE84EL05	2	1	1
RT07ER09	6	5	5
RY26ON05	4	4	1
EY27EP02	3	2	1

CodeID	Q17	Q21	Q51
MS62LD08	7	3	6
NE45US03	6	2	4
ER35ER05	6	6	6
RY16AU12	4	2	2
JO54EN02	4	4	4
WE48RK08	6	3	4
	4	4	4
RS27RT01	7	2	3
GH95OR12	2	3	2
TT20LA06	6	2	2
AN34CE07	7	5	5
	2	2	3
AN46TT10	4	1	2
EY51HI09	6	3	3
WO80CH01	4	2	4
	5	4	4
UM37ER11	1	1	1
IS75ER06	6	5	5
BB30ER04	5	3	4
AN33LT07	4	2	4
CM01ON01	6	5	6
NS30CK08	5	4	3
EU12ER02	5	1	2
SU77EE03	3	3	3
ER50ER07	1	1	4
LS58IZ08	4	2	2
RO53KI08	7	1	4
RE46CK09	6	2	
AD38ER10			
DA22NK05	5	1	2
KR04EN04	6	2	2
RA20GR06	5	3	1
ZE56CE11			
AN97RT07	6	4	
JU46TT10	4	3	1
LS99LL07	7	3	3
NS46ND09	6	6	6
KI89ER12	6	4	6
AK12KY07	4	4	4
WN97AN05			
ON89EL11			
BA31DR12			
ER14NS11	7		
OR23ER03			

CodeID	Q17	Q21	Q51
IN14CH07	4	2	4
BS61ER02			
LK46LK03	7	5	5
CE46RA09	3	2	3
TH79TH08	2	2	2
WN45ER12	1	1	1
RO69NO12			
HA27HU11	7	7	7
FF85RY01	2	2	2
LL07GE07	4	4	4
NR50KR05	7		
OP51BS10			
ER43ER01	1	1	1
ER03ER07			
SI58GH05			
ST39LL06	1	1	1
NZ61EZ06	6	3	3
IS91LE03	7	7	4
ER46CK07	4	1	1
TH95TE11	5	5	4
CE30RY07	4	4	6
PP76ER09	2		
ON53TE11			
EN59BE01	5		
TH39IS04	4	4	
TO72KE09	5	3	3
NE37TZ10	5	1	4
ES96RS09			
KI89PA01	5	3	2
RI92EN11	3	3	3
JO39HL10			
SI07CI08			
OX89MS10	6	5	5
YD68TH09	5	5	4
BA31AN08	4	5	4
ST89AM11			
MS62LD08	7	5	6
IS08TS05	5	4	4
AN67AL11	1	1	1
ER35ER05	6	5	6
SH02EY04	3	3	3
LY13IN09	5	4	4
RU43BU02	3	2	2
EM58ER09	5	5	5

CodeID	Q17	Q21	Q51
AN70TH03	5	2	4
OX59LL12	4	4	3
ER82SH04	6	5	5
US22RD02	5	3	4
RS94SH05	4	4	4
US59ER11	5	2	3
BO20LL09	4	4	4
ER53LL10	6	4	2
KL02US10	6	6	6
RL49LS06	4	1	1
US67LL06			
OW56RE12	4	4	4
RS27RT01	7	5	3
EK59OD06			
ER03ER10	3	3	4
HA07ER09	6	5	6

## Context – Perceived Organizational Support

CodeID	Q64	Q68 [R]	Q71	Q74	Q76	Q80 [R]
EN90ER11	6	4	6	6	5	1
ER58ON01	2	4	4	4	3	4
MS41EY07	2	4	3	2	2	6
LE24SO01	5	2	5	3	5	5
ER00EN11	3	5	3	1	1	5
LL91TH12	6	2	5	6	6	2
ER15AN02	5	4	5	4	3	3
LE23ER11	2	4	4	3	4	4
ME19ES05	4	3	4	4	4	4
DS55RN04	5	2	6	5	5	2
ER55CE03	4	2	5	5	5	3
FT69ER02	6	2	7	6	6	1
AR29LE03	3	3	4	3	4	6
WI57KE01	4	4	4	4	4	4
LL61KE12	5	2	5	5	5	2
AR46RN06	6	3	4	5	4	4
LY92ER09	3	3	5	4	3	3
TH01IN02	4	5	4	3	3	4
	2	4	4	3	3	5
NN02IS09	3	6	4	2	2	6
	5	2	6	5	3	3
NS39MS03	1	7	1	1	1	7
ER03ON10	3	5	5	3	3	5
ER10ER02	5	2	5	5	5	2
OD16TT11	5	2	5	5	5	2
TH49GE01	4	4	4	4	4	4
BA17TT10	1	6	1	1	3	6
MA41AD07	5	3	5	5	5	3
TH35ER05	3	5	4	3	4	6
LE68ER11	5	7	4	2	5	1
HU26TS06	7	2	7	6	6	1
IS42IS10	5	2	5	6	5	4
	5	5	5	4	5	3
ER97ST11	6	2	4	2	5	5
ON63NS02	4	3	4	5	4	3
PP41IS05	5	3	5	5	5	3
MI63EN02	3	3	4	4	5	3
NG42ON04	6	3	5	5	6	1
VE84EL05	4	4	4	4	4	4
RT07ER09	5	1	7	7	7	1
RY26ON05	5	5	5	3	4	4
EY27EP02	5	5	5	2	3	3
MS62LD08	7	1	6	6	6	5
NE45US03	6	2	5	6	6	2
ER35ER05	6	2	5	6	6	2
RY16AU12	6	3	5	5	5	2

CodeID	Q64	Q68 [R]	Q71	Q74	Q76	Q80 [R]
JO54EN02	4	5	5	5	5	3
WE48RK08	5	3	6	4	5	3
	4	5	4	4	3	5
RS27RT01	5	2	5	3	5	4
GH95OR12	5	2	4	6	5	2
TT20LA06	5	1	6	6	6	2
AN34CE07	6	1	6	6	6	6
	3	5	5	4	4	5
AN46TT10	6	1	6	6	6	1
EY51HI09	5	3	5	6	5	3
WO80CH01	5	5	3	3	3	2
	4	6	1	2	7	7
UM37ER11	1	7	7	1	1	7
IS75ER06	6	1	6	6	6	2
BB30ER04	4	5	2	5	3	4
AN33LT07	5	2	6	5	5	3
CM01ON01	5	2	6	6	5	2
NS30CK08	3	3	3	3	5	5
EU12ER02	2	6	3	2	3	6
SU77EE03	5	3	5	5	5	3
ER50ER07	2	3	5	6	5	5
LS58IZ08	4	2	6	6	6	2
RO53KI08	1	7	1	1	1	7
RE46CK09						
AD38ER10						
DA22NK05	7	5	4	5	4	6
KR04EN04	7	2	5	5	5	1
RA20GR06	2	5	3	5	5	3
ZE56CE11						
AN97RT07						
JU46TT10	6	1	6	6	6	1
LS99LL07	6	2	6	5	5	2
NS46ND09	6	1	6	6	6	1
KI89ER12	7	1	6	7	7	2
AK12KY07	5	4	4	3	4	2
WN97AN05						
ON89EL11						
BA31DR12						
ER14NS11						
OR23ER03						
IN14CH07	4	2	6	6	5	2
BS61ER02						
LK46LK03	5	5	5	5	5	3
CE46RA09	5	2	6	6	5	2
TH79TH08	2	6	2	2	2	6
WN45ER12	1	1	1	1	1	7
RO69NO12						
HA27HU11	4	4	6	6	6	6

CodeID	Q64	Q68 [R]	Q71	Q74	Q76	Q80 [R]
FF85RY01	5	4	4	4	4	4
LL07GE07	4	3	6	6	6	3
NR50KR05						
OP51BS10						
ER43ER01	1	5	2	3	4	4
ER03ER07						
SI58GH05						
ST39LL06	4	6	2	3	3	4
NZ61EZ06	5	2	5	5	6	2
IS91LE03	7	1	4	5	5	3
ER46CK07	1	7	1	2	2	7
TH95TE11	4	5	4	3	3	6
CE30RY07	6	5	4	5	5	5
PP76ER09						
ON53TE11						
EN59BE01						
TH39IS04						
TO72KE09	1	5	3	3	3	5
NE37TZ10	6	2	6	6	6	2
ES96RS09						
KI89PA01	3	3	4	3	3	4
RI92EN11	5	5	3	6	3	5
JO39HL10						
SI07CI08						
OX89MS10	6	2	4	5	6	2
YD68TH09	6	2	5	5	5	2
BA31AN08	5	1	6	6	6	1
ST89AM11						
MS62LD08	6	2	6	5	5	3
IS08TS05	6	1	5	5	5	3
AN67AL11	5	4	3	4	4	3
ER35ER05	6	2	6	6	6	2
SH02EY04	5	6	3	3	3	5
LY13IN09	6	3	5	5	5	3
RU43BU02	5	3	5	5	5	3
EM58ER09	6	2	6	5	5	2
AN70TH03	4	4	4	4	4	4
OX59LL12	1	7	1	1	1	7
ER82SH04	5	3	4	5	5	3
US22RD02	5	3	5	5	5	3
RS94SH05	4	4	4	4	3	6
US59ER11	5	3	4	4	4	4
BO20LL09	4	4	4	4	4	3
ER53LL10	3	5	4	1	3	5
KL02US10	3	6	5	3	2	6
RL49LS06	3	5	3	3	3	5
US67LL06						
OW56RE12	6	2	6	6	6	2

CodeID	Q64	Q68 [R]	Q71	Q74	Q76	Q80 [R]
RS27RT01	6	1	3	4	6	2
EK59OD06						
ER03ER10	5	2	6	5	5	5
HA07ER09						

## Context – Discrepancy

CodeID	Q66	Q79	Q82
EN90ER11	4	4	7
ER58ON01	5	4	6
MS41EY07	7	2	7
LE24SO01	2	4	5
ER00EN11	5	4	5
LL91TH12	2	3	5
ER15AN02	2	4	3
LE23ER11	6	6	6
ME19ES05	4	3	4
DS55RN04	3	6	4
ER55CE03	5	3	3
FT69ER02	2	6	1
AR29LE03	7	2	6
WI57KE01	4	4	5
LL61KE12	4	5	2
AR46RN06	6	4	4
LY92ER09	5	4	5
TH01IN02	4	5	6
	3	3	4
NN02IS09	5	2	6
	6	3	6
NS39MS03	7	1	7
ER03ON10	5	3	6
ER10ER02	7	4	6
OD16TT11	5	5	6
TH49GE01	1	1	6
BA17TT10	4	4	4
MA41AD07	3	3	4
TH35ER05	4	2	4
LE68ER11	4	1	4
HU26TS06	6	5	4
IS42IS10	6	5	4
	5	5	5
ER97ST11	2	2	5
ON63NS02	3	4	4
PP41IS05	5	5	5
MI63EN02	5	4	6
NG42ON04	4	6	2
VE84EL05	4	2	4
RT07ER09	4	6	4
RY26ON05	5	5	6
EY27EP02	5	2	5
MS62LD08	7	2	6
NE45US03	4	6	5
ER35ER05	6	6	2
RY16AU12	4	4	4

CodeID	Q66	Q79	Q82
JO54EN02	5	3	5
WE48RK08	5	4	5
	4	4	5
RS27RT01	4	6	3
GH95OR12	4	5	6
TT20LA06	3	6	5
AN34CE07	6	5	5
	4	4	5
AN46TT10	4	6	2
EY51HI09	5	5	4
WO80CH01	4	4	4
	4	4	7
UM37ER11	3	1	7
IS75ER06	5	6	5
BB30ER04	5	4	5
AN33LT07	7	4	6
CM01ON01	6	6	2
NS30CK08	4	3	5
EU12ER02	5	3	7
SU77EE03	7	5	6
ER50ER07	6	1	7
LS58IZ08	7	4	6
RO53KI08	4	4	7
RE46CK09			
AD38ER10			
DA22NK05	1	5	7
KR04EN04	2	1	7
RA20GR06	2	6	6
ZE56CE11			
AN97RT07			
JU46TT10	1	6	3
LS99LL07	5	6	6
NS46ND09	4	6	5
KI89ER12	5	7	7
AK12KY07	4	4	4
WN97AN05			
ON89EL11			
BA31DR12			
ER14NS11			
OR23ER03			
IN14CH07	6	4	6
BS61ER02			
LK46LK03	5	5	5
CE46RA09	3	5	5
TH79TH08	4	4	6
WN45ER12	1	1	7
RO69NO12			
HA27HU11	7	5	7

CodeID	Q66	Q79	Q82
FF85RY01	4	4	4
LL07GE07	4	4	6
NR50KR05			
OP51BS10			
ER43ER01	4	7	7
ER03ER07			
SI58GH05			
ST39LL06	4	4	6
NZ61EZ06	6	5	6
IS91LE03	7	6	7
ER46CK07	7	2	7
TH95TE11	4	5	6
CE30RY07	2	3	6
PP76ER09			
ON53TE11			
EN59BE01			
TH39IS04			
TO72KE09	4	3	6
NE37TZ10	4	5	1
ES96RS09			
KI89PA01	5	3	4
RI92EN11	6	6	3
JO39HL10			
SI07CI08			
OX89MS10	5	5	3
YD68TH09	2	5	4
BA31AN08	2	6	2
ST89AM11			
MS62LD08	6	6	4
IS08TS05	5	5	5
AN67AL11	5	4	4
ER35ER05	6	6	3
SH02EY04	4	3	4
LY13IN09	4	5	4
RU43BU02	4	4	5
EM58ER09	4	5	5
AN70TH03	4	5	3
OX59LL12	7	1	7
ER82SH04	2	4	4
US22RD02	3	4	5
RS94SH05	4	4	5
US59ER11	5	3	5
BO20LL09	5	4	5
ER53LL10	6	1	7
KL02US10	4	3	6
RL49LS06	5	3	4
US67LL06			
OW56RE12	5	5	4

CodeID	Q66	Q79	Q82
RS27RT01	4	7	5
EK59OD06			
ER03ER10	5	6	5
HA07ER09			

## Context – Principal Support

CodeID	Q1	Q28
EN90ER11	6	5
ER58ON01	7	5
MS41EY07	1	4
LE24SO01	4	4
ER00EN11	4	3
LL91TH12	6	3
ER15AN02	6	4
LE23ER11	5	4
ME19ES05	5	4
DS55RN04	5	4
ER55CE03	6	3
FT69ER02	7	6
AR29LE03	3	3
WI57KE01	6	4
LL61KE12	4	4
AR46RN06	6	4
LY92ER09	6	4
TH01IN02	4	4
	4	4
NN02IS09	6	4
	6	4
NS39MS03	4	4
ER03ON10	6	2
ER10ER02	6	5
OD16TT11	6	5
TH49GE01	6	4
BA17TT10	3	3
MA41AD07	4	5
TH35ER05	4	4
LE68ER11	5	4
HU26TS06	6	5
IS42IS10	6	4
	4	4
ER97ST11	6	4
ON63NS02	6	4
PP41IS05	5	5
MI63EN02	5	4
NG42ON04	6	4
VE84EL05	4	3
RT07ER09	6	4
RY26ON05	5	4
EY27EP02	6	4

CodeID	Q1	Q28
MS62LD08	6	5
NE45US03	6	5
ER35ER05	6	5
RY16AU12	4	4
JO54EN02	5	4
WE48RK08	7	4
	4	3
RS27RT01	2	4
GH95OR12	6	2
TT20LA06	6	5
AN34CE07	5	6
	5	4
AN46TT10	6	4
EY51HI09	6	4
WO80CH01	6	4
	3	3
UM37ER11	2	1
IS75ER06	6	6
BB30ER04	5	3
AN33LT07	6	4
CM01ON01	6	6
NS30CK08	5	3
EU12ER02	5	1
SU77EE03	5	3
ER50ER07	2	4
LS58IZ08	6	4
RO53KI08	4	4
RE46CK09	5	1
AD38ER10		
DA22NK05	4	1
KR04EN04	7	5
RA20GR06	5	4
ZE56CE11		
AN97RT07	6	4
JU46TT10	4	4
LS99LL07	5	3
NS46ND09	6	5
KI89ER12	7	5
AK12KY07	6	4
WN97AN05		
ON89EL11		
BA31DR12		
ER14NS11	5	
OR23ER03		

CodeID	Q1	Q28
IN14CH07	6	6
BS61ER02		
LK46LK03	7	5
CE46RA09	6	3
TH79TH08	2	2
WN45ER12	1	1
RO69NO12		
HA27HU11	4	7
FF85RY01	4	4
LL07GE07	6	4
NR50KR05	7	
OP51BS10		
ER43ER01	2	1
ER03ER07		
SI58GH05		
ST39LL06	5	4
NZ61EZ06	5	4
IS91LE03	7	4
ER46CK07	2	2
TH95TE11	7	4
CE30RY07	5	4
PP76ER09	5	
ON53TE11		
EN59BE01	4	
TH39IS04	5	4
TO72KE09	3	4
NE37TZ10	5	4
ES96RS09		
KI89PA01	5	4
RI92EN11	7	5
JO39HL10		
SI07CI08		
OX89MS10	7	6
YD68TH09	7	4
BA31AN08	6	5
ST89AM11		
MS62LD08	6	6
IS08TS05	6	5
AN67AL11	5	4
ER35ER05	7	5
SH02EY04	4	4
LY13IN09	5	5
RU43BU02	5	4
EM58ER09	6	5

CodeID	Q1	Q28
AN70TH03	3	5
OX59LL12	4	2
ER82SH04	6	5
US22RD02	4	4
RS94SH05	4	4
US59ER11	5	5
BO20LL09	7	4
ER53LL10	4	3
KL02US10	6	6
RL49LS06	3	1
US67LL06		
OW56RE12	6	4
RS27RT01	6	4
EK59OD06		
ER03ER10	6	4
HA07ER09	6	5

### Individual – Positive Affect

CodeID	Active	Attentive	Determined	Inspired	Alert	Proud	Enthusiastic	Strong	Excited	Interested
EN90ER11	4	3	3	2	4	4	4	5	4	4
ER58ON01	5	4	4	4	4	4	4	4	4	4
MS41EY07	1	1	1	1	1	1	1	1	1	1
LE24SO01	3	1	2	2	2	3	2	3	3	3
ER00EN11	4	4	2	3	3	3	2	3	3	3
LL91TH12	4	4	3	4	5	4	4	4	4	4
ER15AN02	4	1	2	1	1	1	1	1	1	1
LE23ER11	5	3	3	4	3	3	4	4	3	4
ME19ES05	3	1	1	2	2	3	3	1	4	3
DS55RN04	4	4	3	4	3	4	4	3	4	4
ER55CE03	4	4	5	4	4	4	3	4	4	5
FT69ER02	5	4	5	5	5	5	5	5	4	4
AR29LE03	3	1	3	1	2	3	3	2	3	3
WI57KE01	3	2	2	3	2	3	2	2	3	3
LL61KE12	3	2	2	2	1	1	2	3	3	2
AR46RN06	5	4	5	5	4	5	5	5	5	5
LY92ER09	5	2	5	3	4	5	4	5	4	4
TH01IN02	4	3	4	4	4	4	3	4	4	4
	2	1	1	1	1	1	1	1	2	1
NN02IS09	3	3	1	3	2	2	3	3	3	3
	5	5	4	5	4	4	5	4	5	5
NS39MS03	4	3	4	4	4	4	5	4	4	4
ER03ON10	3	3	3	3	3	1	2	3	3	2
ER10ER02	3	3	3	3	3	4	3	3	3	3
OD16TT11	4	3	3	3	2	4	3	4	4	4
TH49GE01	3	4	3	3	2	3	1	4	3	1
BA17TT10	3	4	4	3	3	3	3	3	3	4
MA41AD07	3	3	3	4	4	4	2	4	4	3
TH35ER05	5	3	5	3	4	3	2	5	3	5
LE68ER11	4	1	1	3	1	3	2	4	5	5
HU26TS06	5	4	4	4	4	4	4	5	4	4
IS42IS10	4	3	4	4	4	4	4	5	4	4
	3	3	3	3	3	3	3	3	3	3
ER97ST11	3	3	2	3	1	4	2	4	4	
ON63NS02	2	1	1	2	1	1	1	1	3	1
PP41IS05	4	3	3	3	3	4	3	4	3	3
MI63EN02	4	3	3	3	3	3	2	4	4	4
NG42ON04	5	5	4	4	4	4	4	5	5	4

								Active	
								Determined	
								Inspired	
								Alert	
								Proud	
								Enthusiastic	
								Strong	
								Excited	
								Interested	
CodeID									
VE84EL05	4	3	4	3	3	2	2	2	2
RT07ER09	4	3	4	3	3	4	3	3	4
RY26ON05	4	5	4	5	4	4	4	4	5
EY27EP02	3	1	2	1	2	2	2	3	3
MS62LD08	5	5	3	5	5	5	5	5	5
NE45US03	4	4	3	4	4	3	4	4	4
ER35ER05	4	3	3	4	4	3	3	3	3
RY16AU12	3	1	1	2	2	2	1	2	2
JO54EN02	4	3	3	3	4	4	3	3	4
WE48RK08	4	4	4	3	3	4	4	4	4
	4	1	4	3	3	4	3	4	4
RS27RT01	4	4	5	4	5	4	3	4	4
GH95OR12	4	3	4	4	3	4	3	3	4
TT20LA06	3	3	3	3	3	3	3	2	3
AN34CE07	5	4	4	4	5		4	4	5
	5	4	5	4	5	5	5	5	5
AN46TT10	3	2	1	3	1	1	2	2	2
EY51HI09	4	4	3	4	3	3	4	3	3
WO80CH01	4	3	3	3	3	3	3	3	3
	4	2	1	2	1	2	1	2	2
UM37ER11	4	3	2	2	1	3	1	4	4
IS75ER06	4	4	3	4				3	2
BB30ER04	4	3	2	4	5	4	2	4	4
AN33LT07	4	3	4	4	4	5	3	5	5
CM01ON01	4	2	4	4	4	4	3	5	4
NS30CK08	3	2	1	3	2	2	2	2	2
EU12ER02	4	3	2	4	3	4	2	4	4
SU77EE03	5	5	5	5	4	4	4	5	5
ER50ER07	3	2	3	4	3	3	3	4	4
LS58IZ08	5	4	4	5	4	4	3	5	4
RO53KI08	5	5	3	4	4	5	5	5	4
RE46CK09									
AD38ER10									
DA22NK05	5	5	5	3	3	2	3	1	1
KR04EN04	5	3	4	4	5	4	4	4	4
RA20GR06	3	2	3	3	3	3	2	4	3
ZE56CE11									
AN97RT07									
JU46TT10	3	1	3	1	1	1	1	1	1
LS99LL07	5	5	4	4	5	5	5	5	5

									Active	
									Attentive	
									Determined	
									Inspired	
									Alert	
									Proud	
									Enthusiastic	
									Strong	
									Excited	
									Interested	
CodeID										
NS46ND09										5
KI89ER12	5	5	5	5	4	5	5	5	5	5
AK12KY07	3	3	4	4	4	4	4	4	3	4
WN97AN05										
ON89EL11										
BA31DR12										
ER14NS11										
OR23ER03										
IN14CH07	4	4	4	5	5	5	3	4	4	5
BS61ER02										
LK46LK03	4	3	3	4	3	4	3	3	3	4
CE46RA09	4	3	3	3	3	4	3	4	4	4
TH79TH08	2	3	4	4	4	2	2	4	3	4
WN45ER12	5	5	4	4	1	3	1	3	4	3
RO69NO12										
HA27HU11	5	5	5	5	5	5	5	5	5	5
FF85RY01	5	5	4	3	2	5	3	5	5	4
LL07GE07	3	2	3	3	3	3	3	3	4	4
NR50KR05										
OP51BS10										
ER43ER01	4	3	5	3	3	3	2	3	3	3
ER03ER07										
SI58GH05										
ST39LL06	4	4	4	3	4	4	3	4	4	3
NZ61EZ06	4	4	4	4	4	3	3	4	4	4
IS91LE03	5	5	5	5	5	5	5	5	5	5
ER46CK07	2	1	2	1	1	2	1	1	1	1
TH95TE11	4	3	4	3	3	3	3	3	3	3
CE30RY07	5	3	4	4	3	4	3	4	4	4
PP76ER09										
ON53TE11										
EN59BE01										
TH39IS04										
TO72KE09	3	2	2	2	2	3	1	2	3	1
NE37TZ10	4	2	1	1	1	1	1	1	1	1
ES96RS09										
KI89PA01	4	3	3	3	3	3	1	2	2	2
RI92EN11	5	5	5	5	5	5	5	5	5	4
JO39HL10										
SI07CI08										

									Active	
									Attentive	
									Determined	
									Inspired	
									Alert	
									Proud	
									Enthusiastic	
									Strong	
									Excited	
									Interested	
CodeID										
OX89MS10	4	4	5	5	4	4	4	4	4	5
YD68TH09	4	5	4	4	4	4	4	4	5	4
BA31AN08	4	4	3	5	4	5	5	5	4	5
ST89AM11										
MS62LD08	5	5	3	5	5	2	4	5	4	3
IS08TS05	4	3	3	3	4	4	3	4	3	3
AN67AL11	4	4	3	4	3	3	4	3	3	2
ER35ER05	4	3	4	3	4	4	3	3	3	4
SH02EY04	2	1	1	1	2	2	1	2	2	2
LY13IN09	3	3	3	4	4	2	3	4	4	4
RU43BU02	3	1	1	1	1	1	1	1	2	2
EM58ER09	4	3	4	3	3	4	2	3	3	4
AN70TH03	2	2	2	2	2	2	2	2	2	2
OX59LL12	4	4	4	4	2	4	2	4	4	4
ER82SH04	3	3	3	3	3	3	2	2	3	3
US22RD02	3	3	2	2	3	3	3	3	4	4
RS94SH05	2	2	2	2	2	2	2	2	2	2
US59ER11	4	3	3	3	2	3	3	3	3	3
BO20LL09	4	2	2	4	5	5	3	4	4	5
ER53LL10	5	4	4	5	5	3	2	4	4	4
KL02US10	2	2	3	2	3	3	2	3	3	3
RL49LS06	3	2	2	2	2	2	2	2	2	2
US67LL06										
OW56RE12	4	5	5	5	5	5	5	5	5	5
RS27RT01	5	5	5	4	5	5	4	4	4	5
EK59OD06										
ER03ER10	4	2	1	3	3	3	2	4	4	2
HA07ER09										

### Individual – Negative Affect

CodeID	Afraid [R]	Jittery [R]	Nervous [R]	Ashamed [R]	Irritable [R]	Hostile [R]	Scared [R]	Guilty [R]	Upset [R]	Distressed [R]
EN90ER11	1	1	1	2	1	1	1	1	1	1
ER58ON01	1	1	1	1	1	1	1	1	1	1
MS41EY07	1	1	1	1	1	2	1	2	1	1
LE24SO01	1	1	1	1	1	1	1	1	1	1
ER00EN11	3	2	1	2	1	1	1	3	2	2
LL91TH12	1	1	1	2	1	1	1	2	2	2
ER15AN02	3	1	1	1	1	1	1	1	1	1
LE23ER11	2	2	1	2	1	1	1	2	1	1
ME19ES05	1	1	1	1	1	3	1	3	1	1
DS55RN04	2	1	1	2	2	1	1	2	1	1
ER55CE03	2	2	2	2	2	2	2	2	2	2
FT69ER02	1	2	1	1	1	1	1	1	2	1
AR29LE03	5	2	1	1	2	2	2	2	3	2
WI57KE01	1	1	1	2	2	2	1	2	1	1
LL61KE12	2	2	1	2	1	1	1	2	2	2
AR46RN06	1	1	1	1	1	1	1	1	1	1
LY92ER09	2	2	1	1	1	2	1	1	1	1
TH01IN02	1	2	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1
NN02IS09	1	1	1	2	1	1	1	2	1	2
	2	1	1	2	1	1	1	2	2	1
NS39MS03	1	1	1	1	1	1	1	1	1	1
ER03ON10	3	3	1	1	1	1	1	1	1	1
ER10ER02	1	1	1	1	1	2	1	1	1	1
OD16TT11	2	2	1	1	2	1	1	1	1	1
TH49GE01	2	3	1	1	2	4	1	2	1	1
BA17TT10	3	5	1	1	1	3	1	4	4	2
MA41AD07	2	1	1	1	1	2	1	1	1	1
TH35ER05	2	1	1	1	1	1	1	1	1	1
LE68ER11	1	1	1	1	1	1	1	1	1	1
HU26TS06	3	2	1	5	1	2	1	3	3	3
IS42IS10	1	1	1	1	1	1	1	1	1	1
	2	1	1	1	1	1	1	2	1	1
ER97ST11	2	2	1	2	2	2	1	2		2
ON63NS02	1	1	1	1	1	1	1	1	1	1
PP41IS05	2	1	1	2	2	3	1	2	1	1
MI63EN02	3	3	1	1	1	2	1	1	1	1
NG42ON04	2	2	1	1	1	1	1	2	2	1

CodeID	Afraid [R]	Jittery [R]	Nervous [R]	Ashamed [R]	Irritable [R]	Hostile [R]	Scared [R]	Guilty [R]	Upset [R]	Distressed [R]
VE84EL05	2	2	3	1	1	1	3	2	2	2
RT07ER09	2	2	1	2	1	2	1	2	2	2
RY26ON05	2	1	1	2	1	2	1	3	2	1
EY27EP02	1	2	1	2	1	1	1	3	2	1
MS62LD08	2	1	2	2	1	1	1	2	2	1
NE45US03	3	2	1	2	1	3	2	3	3	2
ER35ER05	1	1	1	1	1	1	1	1	1	1
RY16AU12	2	1	1	1	1	2	1	2	2	1
JO54EN02	2	2	1	1	1	1	1	1	1	1
WE48RK08	3	2	2	2	2	2	2	3	3	2
	2	1	1	2	1	2	1	1	1	1
RS27RT01	1	1	1	1	1	1	1	3	1	1
GH95OR12	2	2	1	1	1	1	1	2	1	1
TT20LA06	2	1	1	1	2	1	1	2	1	1
AN34CE07	2	1	1	1	1	2	1	4	3	2
	2	2	3	1	1	2	1	2	1	1
AN46TT10	1	1	1	1	1	1	1	1	1	1
EY51HI09	1	1	1	2	1	1	1	2	2	2
WO80CH01	1	1	1	1	1	1	1	1	1	1
	2	1	1	1	1	1	1	1	1	1
UM37ER11	2	2	1	2	3	5	3	2	2	2
IS75ER06					3	3	2	3		
BB30ER04	2	1	1	3	1	1	1	2	1	1
AN33LT07	1	2	1	1	1	2	1	2	1	1
CM01ON01	2	1	1	1	1	1	1	1	1	1
NS30CK08	1	1	1	1	1	1	1	2	1	1
EU12ER02	3	4	1	2	1	1	1	2	1	2
SU77EE03	1	1	1	1	1	1	1	1	1	1
ER50ER07	2	1	1	1	1	1	1	2	1	1
LS58IZ08	1	1	1	1	1	1	1	1	1	1
RO53KI08	1	1	1	1	1	1	1	1	1	1
RE46CK09										
AD38ER10										
DA22NK05	5	5	5	5	3	3	3	4	5	5
KR04EN04	2	1	2	2	1	1	1	1	1	1
RA20GR06	2	2	1	1	2	2	1	2	1	1
ZE56CE11										
AN97RT07										
JU46TT10	1	1	1	1	1	1	1	1	1	1
LS99LL07	1	1	1	1	1	2	2	2	2	1

CodeID	Afraid [R]	Jittery [R]	Nervous [R]				
Distressed [R]	Upset [R]	Guilty [R]	Scared [R]	Hostile [R]	Irritable [R]	Ashamed [R]	
NS46ND09	1	1	1			1	
KI89ER12	1	1	1	1	2	1	1
AK12KY07	2	1	1	2	1	1	2
WN97AN05							
ON89EL11							
BA31DR12							
ER14NS11							
OR23ER03							
IN14CH07	2	1	1	1	1	1	1
BS61ER02							
LK46LK03	1	1	1	1	1	1	1
CE46RA09	1	1	1	1	1	1	2
TH79TH08	3	2	1	4	2	2	1
WN45ER12	3	1	3	4	5	1	4
RO69NO12							5
HA27HU11	4	2	1	1	1	1	1
FF85RY01	3	2	1	2	1	2	1
LL07GE07	2	1	1	1	2	1	2
NR50KR05							
OP51BS10							
ER43ER01	2	2	1	1	2	2	1
ER03ER07							
SI58GH05							
ST39LL06	1	1	1	1	1	2	3
NZ61EZ06	2	1	1	2	1	1	2
IS91LE03	1	1	1	1	1	1	1
ER46CK07	2	1	1	1	1	2	1
TH95TE11	3	3	1	2	1	1	2
CE30RY07	1	1	1	1	1	2	1
PP76ER09							
ON53TE11							
EN59BE01							
TH39IS04							
TO72KE09	4	4	3	2	1	3	1
NE37TZ10	1	2	1	1	1	1	1
ES96RS09							
KI89PA01	2	2	1	1	2	2	1
RI92EN11	1	1	2	1	1	1	1
JO39HL10							
SI07CI08							

CodeID	Afraid [R]	Jittery [R]	Nervous [R]	Ashamed [R]	Irritable [R]	Hostile [R]	Scared [R]	Guilty [R]	Upset [R]	Distressed [R]
OX89MS10	1	1	2	1	1	1	1	1	1	1
YD68TH09	1	1	1	2	1	1	1	1	2	2
BA31AN08	1	1	1	1	1	1	1	1	1	1
ST89AM11										
MS62LD08	1	1	1	3	1	1	1	2	1	2
IS08TS05	1	1	1	1	1	1	1	1	1	1
AN67AL11	1	2	1	1	1	2	1	3	2	2
ER35ER05	1	1	1	1	1	1	1	1	1	1
SH02EY04	1	1	1	1	1	2	1	1	2	1
LY13IN09	1	1	1	2	1	1	1	3	1	2
RU43BU02	2	2	1	2	1	2	1	2	1	1
EM58ER09	2	2	1	1	1	1	1	1	1	1
AN70TH03	2	2	2	2	2	2	2	2	2	2
OX59LL12	2	2	2	2	2	2	2	2	2	2
ER82SH04	1	2	1	2	2	2	1	2	2	1
US22RD02	3	2	1	2	1	2	1	3	2	2
RS94SH05	1	1	1	1	1	1	1	1	1	1
US59ER11	1	2	1	1	1	1	1	2	2	1
BO20LL09	3	2	2	2	1	2	1	2	1	2
ER53LL10	1	2	1	2	1	2	1	2	2	1
KL02US10	3	2	2	2	1	1	1	2	2	1
RL49LS06	2	1	1	1	1	1	1	1	1	1
US67LL06										
OW56RE12	2	1	1	2	1	1	1	1	1	1
RS27RT01	1	2	1	1	1	2	1	1	1	1
EK59OD06										
ER03ER10	2	1	1	2	1	2	1	2	1	1
HA07ER09										

## Individual – Efficacy

CodeID	Q9	Q24	Q41	Q43 [R]	Q44	Q48
EN90ER11	6	6	6	5	4	6
ER58ON01	6	6	6	1	6	6
MS41EY07	7	7	7	2	7	7
LE24SO01	6	6	6	2	6	6
ER00EN11	6	5	5	4	5	5
LL91TH12	5	4	5	4	5	5
ER15AN02	5	6	5	2	6	5
LE23ER11	4	3	6	6	4	2
ME19ES05	6	6	6	4	6	6
DS55RN04	6	5	6	1	6	5
ER55CE03	6	5	6	3	6	3
FT69ER02	6	6	6	2	6	6
AR29LE03	6	5	6	5	5	6
WI57KE01	4	4	4	4	4	4
LL61KE12	4	5	5	4	4	4
AR46RN06	7	6	7	1	7	7
LY92ER09	6	6	6	2	6	6
TH01IN02	6	6	6	2	6	6
	5	4	6	3	6	5
NN02IS09	5	3	2	4	4	4
	5	5	6	2	6	5
NS39MS03	6	7	7	1	7	7
ER03ON10	6	5	6	2	5	3
ER10ER02	7	5	5	2	5	5
OD16TT11	6	3	6	5	6	6
TH49GE01	6	5	6	4	5	6
BA17TT10	5	5	5	3	5	5
MA41AD07	6	6	5	2	6	6
TH35ER05	6	5	5	4	6	6
LE68ER11	6	6	7	2	6	6
HU26TS06	6	5	6	2	6	6
IS42IS10	6	6	6	2	6	4
	6	5	6	4	5	5
ER97ST11	6	6	3	5	4	5
ON63NS02	6	5	6	4	6	6
PP41IS05	6	6	6	3	6	6
MI63EN02	6	5	6	2	6	6
NG42ON04	7	7	7	1	7	7
VE84EL05	6	4	5	6	4	2
RT07ER09	6	6	6	2	6	6
RY26ON05	7	7	7	1	7	7
EY27EP02	2	5	1	4	5	5
MS62LD08	6	6	6	5	4	3
NE45US03	7	6	6	2	6	6

CodeID	Q9	Q24	Q41	Q43 [R]	Q44	Q48
ER35ER05	5	6	6	2	6	6
RY16AU12	6	3	5	4	4	3
JO54EN02	5	4	4	4	4	4
WE48RK08	4	6	6	3	6	6
	5	5	5	4	5	5
RS27RT01	7	6	6	1	7	7
GH95OR12	6	5	6	4	4	6
TT20LA06	6	6	7	2	6	5
AN34CE07	6	6	7	2	7	6
	4	6	6	4	5	5
AN46TT10	7	6	7	4	4	6
EY51HI09	6	6	6	2	6	6
WO80CH01	4	5	5	2	5	5
	6	6	7	4	6	6
UM37ER11	2	2	5	4	5	1
IS75ER06	3	6	6	5	5	6
BB30ER04	3	3	5	4	4	5
AN33LT07	6	6	6	4	5	6
CM01ON01	7	7	7	1	7	7
NS30CK08	6	5	5	4	5	5
EU12ER02	6	6	6	2	6	5
SU77EE03	7	7	7	1	7	7
ER50ER07	2	3	6	4	7	3
LS58IZ08	4	6	7	2	5	6
RO53KI08	7	7	7	4	7	4
RE46CK09	6	4				
AD38ER10						
DA22NK05	3	5	7	7	7	7
KR04EN04	7	2	5	1	7	5
RA20GR06	5	6	6	3	6	6
ZE56CE11						
AN97RT07	4	3				
JU46TT10	6	5	7	1	7	5
LS99LL07	7	7	7	2	6	7
NS46ND09	6	7	7	2	6	7
KI89ER12	6	4	7	1	7	7
AK12KY07	4	5	4	4	4	4
WN97AN05						
ON89EL11						
BA31DR12						
ER14NS11	6					
OR23ER03						
IN14CH07	6	6	6	5	6	6
BS61ER02						
LK46LK03	6	5	7	4	6	5
CE46RA09	4	4	5	3	6	6
TH79TH08	6	6	6	2	6	6

CodeID	Q9	Q24	Q41	Q43 [R]	Q44	Q48
WN45ER12	1	5	7	5	1	1
RO69NO12						
HA27HU11	7	7	7	7	7	7
FF85RY01	6	5	6	4	5	5
LL07GE07	6	5	5	4	4	5
NR50KR05	7					
OP51BS10						
ER43ER01	2	1	4	4	5	4
ER03ER07						
SI58GH05						
ST39LL06	7	7	7	2	7	7
NZ61EZ06	6	6	6	2	6	3
IS91LE03	7	7	7	1	7	7
ER46CK07	3	5	5	4	5	6
TH95TE11	5	5	5	5	5	5
CE30RY07	7	6	6	4	5	6
PP76ER09	5					
ON53TE11						
EN59BE01	4					
TH39IS04	6	6				
TO72KE09	4	5	5	3	4	5
NE37TZ10	6	6	4	4	4	4
ES96RS09						
KI89PA01	6	6	5	2	5	6
RI92EN11	7	7	6	2	7	6
JO39HL10						
SI07CI08						
OX89MS10	7	5	6	2	6	6
YD68TH09	6	6	7	2	7	6
BA31AN08	7	5	7	1	7	6
ST89AM11						
MS62LD08	7	6	7	2	7	7
IS08TS05	6	5	5	5	5	3
AN67AL11	6	5	4	3	4	5
ER35ER05	6	6	6	2	6	6
SH02EY04	4	4	5	4	4	4
LY13IN09	5	5	6	2	6	4
RU43BU02	4	5	1	4	4	4
EM58ER09	6	6	6	3	5	5
AN70TH03	2	5	6	7	6	3
OX59LL12	5	4	7	4	5	3
ER82SH04	5	5	5	4	5	5
US22RD02	5	4	1	3	5	5
RS94SH05	6	5	4	4	4	4
US59ER11	5	5	6	2	6	5
BO20LL09	5	4	5	4	5	4
ER53LL10	7	6	7	2	5	6

CodeID	Q9	Q24	Q41	Q43 [R]	Q44	Q48
KL02US10	5	5	6	3	6	5
RL49LS06	5	3	5	4	4	3
US67LL06						
OW56RE12	5	6	7	1	7	7
RS27RT01	7	7	7	2	6	6
EK59OD06						
ER03ER10	7	6	7	2	7	6
HA07ER09	6	6	6	2	6	6

### Individual – Innovativeness

CodeID	Q83 [R]	Q84 [R]	Q85 [R]	Q86 [R]	Q87 [R]	Q88 [R]	Q89 [R]	Q90 [R]
EN90ER11	5	3	5	4	6	1	3	2
ER58ON01	1	1	1	6	1	1	1	1
MS41EY07	2	5	2	4	3	5	2	3
LE24SO01	3	5	3	5	3	3	3	2
ER00EN11	3	3	3	5	4	5	3	2
LL91TH12	3	5	2	5	5	5	3	1
ER15AN02	1	2	2	5	3	3	2	2
LE23ER11	2	2	1	4	4	4	2	2
ME19ES05	3	5	3	5	3	5	3	2
DS55RN04	2	2	1	6	2	2	2	1
ER55CE03	3	2	3	5	2	5	2	2
FT69ER02	2	2	2	6	1	2	2	1
AR29LE03	6	5	5	5	3	5	3	3
WI57KE01	2	4	2	4	2	5	3	2
LL61KE12	5	5	3	4	5	5	4	3
AR46RN06	1	1	1	1	1	1	1	1
LY92ER09	5	5	2	6	4	3	3	2
TH01IN02	2	2	2	5	2	2	2	2
	3	6	3	3	3	4	3	3
NN02IS09	2	2	1	6	2	2	2	1
	1	2	1	7	1	2	1	1
NS39MS03	1	3	1	7	1	2	1	1
ER03ON10	2	2	2	2	2	2	2	2
ER10ER02	2	5	3	5	2	5	2	1
OD16TT11	2	5	2	6	2	5	2	2
TH49GE01	3	4	4	4	4	4	3	2
BA17TT10	3	3	3	2	1	4	3	2
MA41AD07	2	3	2	5	2	2	2	2
TH35ER05	2	2	2	5	3	5	2	2
LE68ER11	3	5	5	4	2	3	3	2
HU26TS06	4	2	2	2	2	2	2	2
IS42IS10	2	2	2	4	2	2	2	2
	3	4	3	5	3	4	3	2
ER97ST11	5	5	3	6	3	5	3	5
ON63NS02	6	6	5	3	6	5	4	4
PP41IS05	4	3	3	6	3	4	3	2
MI63EN02	2	4	2	5	3	4	2	1
NG42ON04	2	3	2	4	3	2	2	2
VE84EL05	4	5	4	6	4	5	3	2
RT07ER09	5	5	3	5	3	5	4	3
RY26ON05	1	1	1	7	1	2	1	1
EY27EP02	3	5	3	3	3	5	3	3
MS62LD08	2	2	1	6	1	1	1	1
NE45US03	2	2	3	3	3	3	3	2

CodeID	Q83 [R]	Q84 [R]	Q85 [R]	Q86 [R]	Q87 [R]	Q88 [R]	Q89 [R]	Q90 [R]
ER35ER05	2	5	4	5	3	5	3	2
RY16AU12	4	5	4	5	4	5	4	2
JO54EN02	5	5	4	5	4	4	4	3
WE48RK08	3	3	2	5	3	3	3	2
	2	3	3	6	2	2	2	2
RS27RT01	1	1	1	6	1	1	1	1
GH95OR12	3	2	3	5	4	4	3	1
TT20LA06	6	6	5	5	5	6	6	6
AN34CE07	2	5	2	6	2	5	3	3
	3	3	3	5	4	3	2	2
AN46TT10	2	1	1	1	2	2	1	1
EY51HI09	2	3	2	3	3	3	2	1
WO80CH01	2	2	2	5	2	3	2	2
	2	5	4	6	2	4	2	1
UM37ER11	3	3	3	5	5	5	3	2
IS75ER06	3	5	2	6	3	5	3	2
BB30ER04	2	4	2	6	2	5	2	2
AN33LT07	2	2	2	6	2	2	2	1
CM01ON01	3	2	2	6	2	2	1	2
NS30CK08	3	3	3	3	3	3	3	2
EU12ER02	2	2	2	6	5	3	3	3
SU77EE03	1	2	1	7	1	1	1	1
ER50ER07	2	2	2	2	2	2	2	1
LS58IZ08	2	2	2	6	2	2	2	2
RO53KI08	1	1	1	7	1	1	1	1
RE46CK09								
AD38ER10								
DA22NK05	1	7	1	7	7	1	1	1
KR04EN04	1	1	1	2	1	1	1	1
RA20GR06	2	2	2	6	1	5	3	1
ZE56CE11								
AN97RT07								
JU46TT10	1	1	1	1	1	1	1	1
LS99LL07	1	1	1	6	2	1	1	1
NS46ND09	1	1	1	6	2	1	2	1
KI89ER12	1	1	1	7	1	1	1	1
AK12KY07	2	2	2	5	2	2	2	2
WN97AN05								
ON89EL11								
BA31DR12								
ER14NS11								
OR23ER03								
IN14CH07	3	2	1	6	2	2	2	1
BS61ER02								
LK46LK03	3	5	2	6	3	3	2	2
CE46RA09	3	3	3	5	3	3	3	2
TH79TH08	2	2	2	6	2	2	2	2

CodeID	Q83 [R]	Q84 [R]	Q85 [R]	Q86 [R]	Q87 [R]	Q88 [R]	Q89 [R]	Q90 [R]
WN45ER12	3	5	3	7	4	5	3	3
RO69NO12								
HA27HU11	1	7	6	7	7	6	6	1
FF85RY01	3	2	2	6	2	2	2	2
LL07GE07	3	3	2	5	6	3	3	3
NR50KR05								
OP51BS10								
ER43ER01	2	1	2	6	2	2	2	1
ER03ER07								
SI58GH05								
ST39LL06	1	2	1	6	2	2	1	1
NZ61EZ06	3	3	3	5	3	3	3	3
IS91LE03	1	1	1	6	1	1	1	1
ER46CK07	5	5	5	2	5	5	4	4
TH95TE11	4	5	4	3	5	5	4	4
CE30RY07	1	2	2	5	2	6	3	3
PP76ER09								
ON53TE11								
EN59BE01								
TH39IS04								
TO72KE09	5	5	5	3	3	5	5	3
NE37TZ10	2	4	2	2	3	2	1	1
ES96RS09								
KI89PA01	3	3	3	3	2	2	2	1
RI92EN11	1	1	1	7	1	1	1	1
JO39HL10								
SI07CI08								
OX89MS10	2	2	2	5	2	2	2	2
YD68TH09	2	2	2	5	1	2	2	2
BA31AN08	2	2	2	3	1	2	1	1
ST89AM11								
MS62LD08	2	2	1	5	1	3	2	1
IS08TS05	3	2	3	5	2	2	2	1
AN67AL11	3	2	1	2	3	5	2	2
ER35ER05	2	3	2	4	3	4	2	2
SH02EY04	4	5	5	2	5	5	5	3
LY13IN09	3	5	4	3	3	4	3	2
RU43BU02	3	6	2	5	3	5	2	2
EM58ER09	2	2	2	5	2	2	2	2
AN70TH03	4	4	4	4	4	4	4	4
OX59LL12	1	1	1	7	1	1	1	1
ER82SH04	5	5	5	5	5	5	6	2
US22RD02	3	4	3	5	3	3	3	3
RS94SH05	2	4	4	4	4	4	4	2
US59ER11	3	3	3	5	3	3	2	2
BO20LL09	5	4	4	5	4	4	3	2
ER53LL10	3	3	1	5	2	4	1	1

CodeID	Q83 [R]	Q84 [R]	Q85 [R]	Q86 [R]	Q87 [R]	Q88 [R]	Q89 [R]	Q90 [R]
KL02US10	5	5	5	5	5	5	3	3
RL49LS06	4	5	4	5	3	3	3	3
US67LL06								
OW56RE12	2	2	2	6	2	2	2	2
RS27RT01	1	1	1	7	1	1	1	1
EK59OD06								
ER03ER10	5	2	3	6	5	4	2	2
HA07ER09								

### Individual – Change Commitment (Affective)

CodeID	Q5	Q7 [R]	Q32 [R]	Q40	Q42 [R]	Q46
EN90ER11	5	1	1	6	1	6
ER58ON01	6	2	1	6	1	6
MS41EY07	5	3	4	5	2	4
LE24SO01	5	2	2	5	5	5
ER00EN11	5	3	3	5	4	5
LL91TH12	5	3	2	5	2	5
ER15AN02	6	3	4	4	4	5
LE23ER11	6	2	2	6	2	6
ME19ES05	5	2	3	6	2	5
DS55RN04	6	2	2	6	2	6
ER55CE03	7	2	2	6	1	6
FT69ER02	7	2	2	6	3	6
AR29LE03	5	2	3	5	3	6
WI57KE01	5	2	4	4	4	4
LL61KE12	5	3	4	4	4	4
AR46RN06	6	2	2	5	2	6
LY92ER09	5	2	3	5	3	5
TH01IN02	6	1	2	6	2	6
	5	3	4	4	4	4
NN02IS09	5	3	4	5	3	4
	5	1	2	5	2	4
NS39MS03	7	1	1	6	2	7
ER03ON10	6	2	2	6	6	6
ER10ER02	7	2	1	6	2	6
OD16TT11	5	3	2	5	2	6
TH49GE01	6	2	4	3	4	4
BA17TT10	6	3	4	5	3	5
MA41AD07	6	2	2	6	2	6
TH35ER05	6	2	4	4	3	5
LE68ER11	4	4	2	4	4	4
HU26TS06	6	1	4	6	2	6
IS42IS10	6	2	3	6	4	4
	6	2	3	5	3	5
ER97ST11	7	2	2	5	3	6
ON63NS02	6	2	4	4	4	4
PP41IS05	5	2	3	6	3	6
MI63EN02	6	1	2	6	1	6
NG42ON04	6	2	1	6	2	7
VE84EL05	5	4	4	3	4	4
RT07ER09	7	2	2	6	2	6
RY26ON05	5	2	4	4	2	6
EY27EP02	5	3	3	5	3	5
MS62LD08	7	2	1	7	1	7
NE45US03	7	2	3	6	2	6

CodeID	Q5	Q7 [R]	Q32 [R]	Q40	Q42 [R]	Q46
ER35ER05	6	2	2	6	1	6
RY16AU12	5	3	4	5	4	5
JO54EN02	5	3	4	4	4	4
WE48RK08	7	1	2	7	2	7
	4	4	4	4	4	4
RS27RT01	6	2	2	6	4	6
GH95OR12	6	1	2	6	2	6
TT20LA06	5	3	2	5	3	5
AN34CE07	6	1	1	6	2	7
	6	2	3	4	4	4
AN46TT10	7	1	2	4	4	4
EY51HI09	5	3	3	5	3	5
WO80CH01	5	3	2	5	3	4
	7	2	4	6	4	4
UM37ER11	4	3	1	1	5	2
IS75ER06	6	2	1	6	1	6
BB30ER04	7	2	4	6	2	6
AN33LT07	6	2	2	6	2	6
CM01ON01	7	2	1	6	2	6
NS30CK08	5	2	2	5	3	5
EU12ER02	6	2	2	6	2	6
SU77EE03	7	1	1	7	1	7
ER50ER07	6	3	3	5	3	4
LS58IZ08	6	3	3	5	4	4
RO53KI08	7	1	1	6	4	7
RE46CK09	7	2	2	6		
AD38ER10						
DA22NK05	3	4	2	4	1	7
KR04EN04	7	1	2	6	1	6
RA20GR06	7	2	2	6	2	6
ZE56CE11						
AN97RT07	7	2	4	4		
JU46TT10	5	4	2	5	2	5
LS99LL07	7	1	1	7	1	7
NS46ND09	7	1	1	7	1	7
KI89ER12	7	1	1	7	1	7
AK12KY07	5	4	4	4	3	5
WN97AN05						
ON89EL11						
BA31DR12						
ER14NS11	7	2				
OR23ER03						
IN14CH07	5	1	2	6	2	6
BS61ER02						
LK46LK03	6	1	2	6	2	6
CE46RA09	5	3	3	5	3	5
TH79TH08	6	2	2	6	3	6

CodeID	Q5	Q7 [R]	Q32 [R]	Q40	Q42 [R]	Q46
WN45ER12	1	1	1	1	7	1
RO69NO12						
HA27HU11	7	1	1	7	1	7
FF85RY01	6	2	2	6	3	6
LL07GE07	6	1	2	6	3	6
NR50KR05	7	2				
OP51BS10						
ER43ER01	2	4	4	4	4	2
ER03ER07						
SI58GH05						
ST39LL06	7	1	1	7	4	7
NZ61EZ06	6	2	2	6	2	6
IS91LE03	7	1	1	7	1	7
ER46CK07	3	4	4	2	5	4
TH95TE11	5	3	3	5	4	6
CE30RY07	6	2	2	6	2	6
PP76ER09	4	4				
ON53TE11						
EN59BE01	6	2				
TH39IS04	6	2	2	5		
TO72KE09	5	3	3	4	4	4
NE37TZ10	5	2	3	4	3	4
ES96RS09						
KI89PA01	6	3	3	5	3	6
RI92EN11	7	1	1	7	1	7
JO39HL10						
SI07CI08						
OX89MS10	6	1	2	6	3	6
YD68TH09	6	2	2	6	2	4
BA31AN08	6	3	2	6	3	6
ST89AM11						
MS62LD08	7	2	2	7	2	6
IS08TS05	7	1	3	6	2	6
AN67AL11	6	2	3	5	3	5
ER35ER05	6	2	2	6	2	6
SH02EY04	5	2	4	5	3	4
LY13IN09	6	5	4	5	4	4
RU43BU02	5	4	3	5	4	5
EM58ER09	7	1	2	4	3	5
AN70TH03	6	2	2	6	2	5
OX59LL12	4	2	2	5	5	5
ER82SH04	6	3	3	5	3	5
US22RD02	5	3	3	4	3	5
RS94SH05	6	2	3	5	4	5
US59ER11	6	2	2	5	3	5
BO20LL09	5	3	4	4	4	4
ER53LL10	7	1	1	7	1	6

CodeID	Q5	Q7 [R]	Q32 [R]	Q40	Q42 [R]	Q46
KL02US10	6	5	4	5	5	4
RL49LS06	7	3	4	5	4	5
US67LL06						
OW56RE12	6	2	1	5	5	7
RS27RT01	6	1	1	6	1	6
EK59OD06						
ER03ER10	7	1	2	6	3	5
HA07ER09	6	2	2	6	2	6

### Individual – Change Commitment (Continuance)

CodeID	Q2	Q14	Q15	Q31	Q33	Q45
EN90ER11	4	4	3	2	4	4
ER58ON01	3	3	4	2	2	4
MS41EY07	6	6	2	2	2	2
LE24SO01	3	5	2	2	2	2
ER00EN11	6	4	5	4	3	4
LL91TH12	4	5	4	2	2	5
ER15AN02	2	5	4	5	4	2
LE23ER11	7	7	4	6	3	4
ME19ES05	5	5	3	4	4	4
DS55RN04	6	5	6	5	3	6
ER55CE03	5	6	3	5	5	5
FT69ER02	3	3	5	3	2	2
AR29LE03	5	3	5	5	7	5
WI57KE01	7	5	4	3	4	4
LL61KE12	5	4	4	3	4	4
AR46RN06	4	6	4	4	3	4
LY92ER09	6	6	6	4	6	6
TH01IN02	2	7	4	2	1	2
	6	4	4	5	4	3
NN02IS09	5	3	2	2	6	4
	2	6	4	2	2	4
NS39MS03	7	6	5	2	7	6
ER03ON10	6	6	6	5	2	6
ER10ER02	5	7	4	2	2	1
OD16TT11	6	6	6	5	6	4
TH49GE01	6	6	6	5	6	6
BA17TT10	6	7	7	7	7	7
MA41AD07	4	6	5	4	3	5
TH35ER05	5	6	2	3	3	4
LE68ER11	5	6	6	4	4	6
HU26TS06	6	1	1	4	4	2
IS42IS10	4	2	2	2	2	2
	6	5	4	4	2	3
ER97ST11	3	4	4	4	6	5
ON63NS02	6	4	4	2	5	4
PP41IS05	3	6	4	4	4	3
MI63EN02	5	6	4	5	4	2
NG42ON04	4	7	4	1	1	4
VE84EL05	6	5	4	7	7	5
RT07ER09	3	6	6	5	2	6
RY26ON05	5	7	7	4	6	7
EY27EP02	6	4	4	5	6	3
MS62LD08	2	4	6	3	6	6
NE45US03	5	6	2	5	5	4

CodeID	Q2	Q14	Q15	Q31	Q33	Q45
ER35ER05	5	2	5	4	2	2
RY16AU12	5	5	4	4	6	4
JO54EN02	4	4	4	4	4	4
WE48RK08	5	6	6	4	2	5
	7	6	6	6	5	5
RS27RT01	1	7	1	4	1	4
GH95OR12	6	6	4	5	4	2
TT20LA06	6	6	3	6	2	2
AN34CE07	2	4	3	2	2	2
	3	4	2	3	3	3
AN46TT10	2	6	4	4	2	4
EY51HI09	5	5	5	5	3	3
WO80CH01	6	5	5	2	1	1
	7	6	4	4	6	6
UM37ER11	6	6	4	7	7	6
IS75ER06	3	5	5	4	1	4
BB30ER04	7	6	4	7	6	5
AN33LT07	4	4	2	2	4	4
CM01ON01	2	3	2	1	1	2
NS30CK08	2	6	2	4	3	3
EU12ER02	6	6	6	5	7	6
SU77EE03	7	7	1	5	6	1
ER50ER07	5	3	3	3	3	4
LS58IZ08	3	4	4	2	2	2
RO53KI08	4	4	1	1	4	4
RE46CK09	3	7	6	6	5	
AD38ER10						
DA22NK05	6	4	3	2	3	7
KR04EN04	1	6	3	2	1	1
RA20GR06	2	5	4	2	3	3
ZE56CE11						
AN97RT07	4	4	4	5	4	
JU46TT10	3	2	2	4	2	1
LS99LL07	5	7	1	5	2	6
NS46ND09	3	6	6	2	1	1
KI89ER12	2	4	2	4	1	2
AK12KY07	4	4	3	3	3	4
WN97AN05						
ON89EL11						
BA31DR12						
ER14NS11	6	5	4			
OR23ER03						
IN14CH07	5	6	2	4	2	2
BS61ER02						
LK46LK03	6	7	5	5	4	5
CE46RA09	6	5	4	4	5	4
TH79TH08	4	5	6	4	6	4

CodeID	Q2	Q14	Q15	Q31	Q33	Q45
WN45ER12	7	7	7	7	7	7
RO69NO12						
HA27HU11	1	7	5	4	1	1
FF85RY01	7	6	6	5	3	6
LL07GE07	5	6	6	2	3	3
NR50KR05	7	6	6			
OP51BS10						
ER43ER01	2	4	4	2	6	4
ER03ER07						
SI58GH05						
ST39LL06	4	7	7	4	4	4
NZ61EZ06	3	2	2	2	2	2
IS91LE03	1	2	2	1	1	1
ER46CK07	5	5	4	4	3	4
TH95TE11	5	5	4	5	5	5
CE30RY07	5	1	2	5	6	5
PP76ER09	6	5	3			
ON53TE11						
EN59BE01	3	5	3			
TH39IS04	3	4	4	2	2	
TO72KE09	4	4	4	5	6	5
NE37TZ10	3	5	4	2	4	4
ES96RS09						
KI89PA01	6	6	6	4	2	5
RI92EN11	3	7	7	3	3	5
JO39HL10						
SI07CI08						
OX89MS10	6	6	6	3	2	3
YD68TH09	6	5	3	3	2	5
BA31AN08	2	3	2	3	2	2
ST89AM11						
MS62LD08	5	3	6	4	3	4
IS08TS05	5	5	5	4	1	3
AN67AL11	3	4	5	2	3	4
ER35ER05	2	4	6	2	2	4
SH02EY04	6	4	4	4	4	4
LY13IN09	4	4	3	2	5	4
RU43BU02	2	2	2	2	5	2
EM58ER09	2	2	2	2	2	3
AN70TH03	6	6	6	2	4	1
OX59LL12	5	4	2	6	4	5
ER82SH04	3	3	4	5	2	5
US22RD02	4	5	5	4	4	4
RS94SH05	4	4	4	4	4	4
US59ER11	2	4	4	2	2	2
BO20LL09	7	6	5	4	5	4
ER53LL10	2	4	4	5	2	4

CodeID	Q2	Q14	Q15	Q31	Q33	Q45
KL02US10	5	6	5	6	7	6
RL49LS06	5	3	3	5	5	4
US67LL06						
OW56RE12	6	6	2	3	1	1
RS27RT01	2	7	7	2	1	6
EK59OD06						
ER03ER10	6	6	2	3	2	2
HA07ER09	4	6	6	2	5	2

### Individual – Change Commitment (Normative)

CodeID	Q20	Q30	Q39	Q53 [R]	Q53-R	Q57	Q58 [R]	Q58-R
EN90ER11	4	6	4	4	4	4	4	4
ER58ON01	2	6	4	3	5	6	1	7
MS41EY07	2	2	3	2	6	3	6	2
LE24SO01	2	5	3	4	4	5	5	3
ER00EN11	4	5	5	5	3	5	4	4
LL91TH12	4	6	5	5	3	5	3	5
ER15AN02	2	3	4	5	3	4	4	4
LE23ER11	7	6	6	4	4	6	2	6
ME19ES05	4	6	5	3	5	5	3	5
DS55RN04	4	5	6	3	5	5	3	5
ER55CE03	3	6	5	6	2	5	1	7
FT69ER02	2	6	3	3	5	5	2	6
AR29LE03	3	5	5	5	3	5	3	5
WI57KE01	2	4	4	4	4	4	4	4
LL61KE12	3	4	4	4	4	4	4	4
AR46RN06	4	4	4	4	4	4	2	6
LY92ER09	6	5	6	2	6	6	2	6
TH01IN02	1	5	5	2	6	6	2	6
	2	4	4	6	2	4	5	3
NN02IS09	2	3	5	5	3	3	5	3
	2	5	5	4	4	6	2	6
NS39MS03	1	3	1	7	1	1	3	5
ER03ON10	4	6	5	5	3	6	2	6
ER10ER02	1	5	2	6	2	2	2	6
OD16TT11	6	6	6	6	2	6	2	6
TH49GE01	5	4	3	3	5	3	4	4
BA17TT10	4	6	7	2	6	7	2	6
MA41AD07	4	6	5	3	5	6	3	5
TH35ER05	2	3	4	4	4	5	3	5
LE68ER11	7	6	7	1	7			
HU26TS06	1	6	5	4	4	2	2	6
IS42IS10	2	6	3	6	2	6	2	6
	4	4	3	6	2	3	3	5
ER97ST11	6	6	6	2	6	6	2	6
ON63NS02	4	4	5	3	5	4	4	4
PP41IS05	4	4	4	4	4	4	4	4
MI63EN02	6	4	5	3	5	3	3	5
NG42ON04	3	7	2	5	3	5	5	3
VE84EL05	5	4	6	3	5	4	5	3
RT07ER09	5	6	6	2	6	6	2	6
RY26ON05	4	4	7	2	6	6	2	6
EY27EP02	3	5	3	6	2	5	5	3
MS62LD08	1	7	6	3	5	7	2	6
NE45US03	5	6	5	4	4	5	3	5

CodeID	Q20	Q30	Q39	Q53 [R]	Q53-R	Q57	Q58 [R]	Q58-R
ER35ER05	2	6	4	2	6	2	2	6
RY16AU12	4	4	6	3	5	4	3	5
JO54EN02	4	4	4	4	4	4	3	5
WE48RK08	1	7	7	2	6	7	2	6
	6	6	6	2	6	6	2	6
RS27RT01	1	6	1	7	1	5	2	6
GH95OR12	4	4	6	3	5	6	2	6
TT20LA06	2	6	4	6	2	5	3	5
AN34CE07	2	6	4	5	3	5	2	6
	2	5	4	4	4	4	3	5
AN46TT10	2	4	2	6	2	2	4	4
EY51HI09	3	6	3	3	5	3	3	5
WO80CH01	2	5	5	2	6	4	3	5
	2	4	6	4	4	7	2	6
UM37ER11	3	1	3	5	3	5	5	3
IS75ER06	4	6	6	3	5	5	5	3
BB30ER04	4	5	4	3	5	5	2	6
AN33LT07	4	5	6	2	6	4	2	6
CM01ON01	2	7	1	7	1	1	1	7
NS30CK08	6	4	3	5	3	3	5	3
EU12ER02	6	6	6	2	6	6	2	6
SU77EE03	5	5	1	7	1	1	3	5
ER50ER07	2	3	3	5	3	5	2	6
LS58IZ08	2	4	4	2	6	4	3	5
RO53KI08	1	7	4	1	7	1	4	4
RE46CK09	4	5	5					
AD38ER10								
DA22NK05	7	1	5	2	6	4	3	5
KR04EN04	1	6	1	1	7	1	1	7
RA20GR06	2	5	6	3	5	5	3	5
ZE56CE11								
AN97RT07	2	4	4					
JU46TT10	3	4	2	7	1	1	2	6
LS99LL07	6	7	6	2	6	6	2	6
NS46ND09	5	6	6	6	2	1	1	7
KI89ER12	2	6	3	2	6	4	4	4
AK12KY07	3	4	4	4	4	4	5	3
WN97AN05								
ON89EL11								
BA31DR12								
ER14NS11								
OR23ER03								
IN14CH07	2	5	2	4	4	2	4	4
BS61ER02								
LK46LK03	5	6	6	4	4	4	3	5
CE46RA09	4	5	4	4	4	5	3	5
TH79TH08	4	6	6	4	4	6	6	2

CodeID	Q20	Q30	Q39	Q53 [R]	Q53-R	Q57	Q58 [R]	Q58-R
WN45ER12	4	1	4	1	7	4	7	1
RO69NO12								
HA27HU11	7	7	1	7	1	7	1	7
FF85RY01	2	4	2	3	5	4	6	2
LL07GE07	5	6	6	4	4	5	3	5
NR50KR05								
OP51BS10								
ER43ER01	1	1	2	5	3	2	6	2
ER03ER07								
SI58GH05								
ST39LL06	4	4	4	1	7	6	2	6
NZ61EZ06	2	5	2	3	5	2	2	6
IS91LE03	1	7	4	7	1	1	1	7
ER46CK07	2	4	2	6	2	2	5	3
TH95TE11	3	5	4	3	5	5	3	5
CE30RY07	1	6	6	4	4	7	1	7
PP76ER09								
ON53TE11								
EN59BE01								
TH39IS04	2	5	2					
TO72KE09	4	4	5	3	5	5	4	4
NE37TZ10	4	3	4	4	4	4	4	4
ES96RS09								
KI89PA01	5	5	5	2	6	5	5	3
RI92EN11	1	7	3	6	2	7	1	7
JO39HL10								
SI07CI08								
OX89MS10	4	6	2	5	3	6	2	6
YD68TH09	2	7	5	2	6	6	2	6
BA31AN08	2	3	6	1	7	6	2	6
ST89AM11								
MS62LD08	3	7	6	3	5	5	1	7
IS08TS05	1	5	4	3	5	5	3	5
AN67AL11	4	5	4	4	4	4	4	4
ER35ER05	4	6	4	3	5	5	3	5
SH02EY04	4	4	4	4	4	4	4	4
LY13IN09	5	6	6	4	4	4	4	4
RU43BU02	2	2	5	5	3	2	6	2
EM58ER09	2	6	3	5	3	3	5	3
AN70TH03	4	4	6	1	7	7	2	6
OX59LL12	2	5	4	4	4	3	4	4
ER82SH04	6	5	6	3	5	5	3	5
US22RD02	3	4	4	4	4	5	3	5
RS94SH05	4	4	4	4	4	4	4	4
US59ER11	2	4	4	2	6	3	2	6
BO20LL09	5	5	5	3	5	5	3	5
ER53LL10	3	6	6	2	6	6	2	6

CodeID	Q20	Q30	Q39	Q53 [R]	Q53-R	Q57	Q58 [R]	Q58-R
KL02US10	5	5	7	4	4	4	2	6
RL49LS06	4	1	4	4	4	4	4	4
US67LL06								
OW56RE12	4	4	5	6	2	5	2	6
RS27RT01	4	6	6	4	4	5	1	7
EK59OD06								
ER03ER10	6	6	2	6	2	5	2	6
HA07ER09	6	6	6	2	6	6	2	6

## Individual – Pessimism

CodeID	Q22 [R]	Q59 [R]	Q61 [R]	Q67 [R]
EN90ER11	2	2	2	3
ER58ON01	2	2	2	4
MS41EY07	6	6	6	7
LE24SO01	2	3	5	5
ER00EN11	3	6	4	4
LL91TH12	2	2	2	3
ER15AN02	2	5	3	4
LE23ER11	5	6	2	3
ME19ES05	2	3	2	3
DS55RN04	2	3	2	3
ER55CE03	2	3	2	3
FT69ER02	1	5	2	2
AR29LE03	5	5	6	6
WI57KE01	4	4	4	4
LL61KE12	3	3	3	4
AR46RN06	2	2	2	3
LY92ER09	4	5	4	5
TH01IN02	2	4	2	5
	4	5	5	5
NN02IS09	4	4	5	3
	3	3	3	5
NS39MS03	3	6	6	7
ER03ON10	2	2	2	2
ER10ER02	2	3	5	2
OD16TT11	2	3	2	3
TH49GE01	2	4	5	6
BA17TT10	2	4	4	4
MA41AD07	3	3	3	3
TH35ER05	4	5	4	3
LE68ER11	3	4	4	3
HU26TS06	1	2	2	2
IS42IS10	2	4	2	4
	3	4	2	3
ER97ST11	2	4	5	5
ON63NS02	4	5	4	5
PP41IS05	3	4	3	4
MI63EN02	2	4	3	4
NG42ON04	2	3	3	3
VE84EL05	5			6
RT07ER09	2	2	2	3
RY26ON05	5	5	3	3
EY27EP02	3	5	3	5
MS62LD08	1	1	1	2
NE45US03	2	5	3	5

CodeID	Q22 [R]	Q59 [R]	Q61 [R]	Q67 [R]
ER35ER05	2	2	2	2
RY16AU12	3	4	4	4
JO54EN02	3	4	4	5
WE48RK08	2	2	1	3
	3	4	3	4
RS27RT01	1	1	1	2
GH95OR12	2	3	2	4
TT20LA06	2	3	5	4
AN34CE07	1	2	1	3
	2	4	4	3
AN46TT10	1	4	2	2
EY51HI09	2	3	2	3
WO80CH01	4	2	2	4
	1	4	4	4
UM37ER11	2	7	6	3
IS75ER06	1	2	2	2
BB30ER04	4	3	4	4
AN33LT07	2	5	3	2
CM01ON01	2	2	1	2
NS30CK08	7	5	2	5
EU12ER02	1	5	2	6
SU77EE03	5	6	6	6
ER50ER07	3	6	5	5
LS58IZ08	2	4	5	5
RO53KI08	1	6	7	7
RE46CK09	6			
AD38ER10				
DA22NK05	2	4	4	1
KR04EN04	1	1	1	1
RA20GR06	2	5	2	2
ZE56CE11				
AN97RT07	4			
JU46TT10	2	4	1	1
LS99LL07	1	4	2	1
NS46ND09	3	2	1	2
KI89ER12	2	2	1	1
AK12KY07	3	4	4	3
WN97AN05				
ON89EL11				
BA31DR12				
ER14NS11				
OR23ER03				
IN14CH07	3	5	5	2
BS61ER02				
LK46LK03	2	5	2	5
CE46RA09	3	4	4	3
TH79TH08	6	4	3	3

CodeID	Q22 [R]	Q59 [R]	Q61 [R]	Q67 [R]
WN45ER12	7	7	7	7
RO69NO12				
HA27HU11	7	4	1	7
FF85RY01	2	4	3	4
LL07GE07	3	3	4	3
NR50KR05				
OP51BS10				
ER43ER01	5	5	6	6
ER03ER07				
SI58GH05				
ST39LL06	1	2	1	2
NZ61EZ06	3	2	2	2
IS91LE03	1	1	1	1
ER46CK07	6	6	6	6
TH95TE11	3	5	5	5
CE30RY07	2	2	2	5
PP76ER09				
ON53TE11				
EN59BE01				
TH39IS04	2			
TO72KE09	3	4	3	4
NE37TZ10	1	1	1	5
ES96RS09				
KI89PA01	2	4	3	4
RI92EN11	6	1	3	3
JO39HL10				
SI07CI08				
OX89MS10	2	3	2	2
YD68TH09	2	2	2	2
BA31AN08	1	1	1	1
ST89AM11				
MS62LD08	1	2	1	1
IS08TS05	2	2	1	3
AN67AL11	3	5	4	4
ER35ER05	2	2	2	2
SH02EY04	3	5	5	5
LY13IN09	3	3	4	4
RU43BU02	2	6	5	3
EM58ER09	1	3	1	3
AN70TH03	5	4	4	4
OX59LL12	3	4	7	7
ER82SH04	3	4	3	5
US22RD02	3	3	3	3
RS94SH05	4	4	4	4
US59ER11	2	2	2	2
BO20LL09	3	4	4	4
ER53LL10	1	4	4	5

CodeID	Q22 [R]	Q59 [R]	Q61 [R]	Q67 [R]
KL02US10	5	4	5	6
RL49LS06	3	6	5	6
US67LL06				
OW56RE12	2	2	2	2
RS27RT01	1	1	1	1
EK59OD06				
ER03ER10	3	3	3	3
HA07ER09	2			

### Individual – Job Satisfaction

CodeID	Q62	Q65	Q69 [R]
EN90ER11	7	6	1
ER58ON01	6	6	1
MS41EY07	2	2	7
LE24SO01	6	6	2
ER00EN11	3	3	5
LL91TH12	6	6	2
ER15AN02	6	6	1
LE23ER11	5	3	3
ME19ES05	6	3	5
DS55RN04	5	5	1
ER55CE03	6	7	1
FT69ER02	7	7	1
AR29LE03	3	3	5
WI57KE01	6	3	4
LL61KE12	6	6	2
AR46RN06	6	6	1
LY92ER09	6	6	1
TH01IN02	6	6	2
	4	4	3
NN02IS09	5	3	3
	6	6	2
NS39MS03	6	5	2
ER03ON10	6	6	2
ER10ER02	6	6	1
OD16TT11	6	6	2
TH49GE01	6	5	2
BA17TT10	5	4	2
MA41AD07	5	6	2
TH35ER05	5	2	2
LE68ER11	7	6	1
HU26TS06	7	7	1
IS42IS10	6	6	2
	7	7	1
ER97ST11	6	4	6
ON63NS02	6	6	2
PP41IS05	4	4	4
MI63EN02	5	5	1
NG42ON04	7	7	1
VE84EL05	6	5	2
RT07ER09	7	7	1
RY26ON05	7	7	1
EY27EP02	6	5	2
MS62LD08	7	7	1
NE45US03	6	7	1

CodeID	Q62	Q65	Q69 [R]
ER35ER05	6	6	2
RY16AU12	6	6	3
JO54EN02	5	5	3
WE48RK08	7	6	1
	5	5	3
RS27RT01	6	6	2
GH95OR12	6	6	1
TT20LA06	6	6	1
AN34CE07	7	7	1
	5	5	3
AN46TT10	7	7	1
EY51HI09	5	5	3
WO80CH01	6	6	2
	3	2	5
UM37ER11	5	3	5
IS75ER06	6	6	1
BB30ER04	7	4	1
AN33LT07	5	5	2
CM01ON01	6	6	2
NS30CK08	5	5	3
EU12ER02	1	2	6
SU77EE03	6	5	3
ER50ER07	6	6	3
LS58IZ08	6	6	1
RO53KI08	1	1	1
RE46CK09			
AD38ER10			
DA22NK05	7	1	4
KR04EN04	5	5	1
RA20GR06	4	3	4
ZE56CE11			
AN97RT07			
JU46TT10	7	7	1
LS99LL07	7	7	1
NS46ND09	7	6	1
KI89ER12	7	7	1
AK12KY07	4	4	4
WN97AN05			
ON89EL11			
BA31DR12			
ER14NS11			
OR23ER03			
IN14CH07	7	7	2
BS61ER02			
LK46LK03	5	5	3
CE46RA09	6	6	2
TH79TH08	2	2	6

CodeID	Q62	Q65	Q69 [R]
WN45ER12	5	5	3
RO69NO12			
HA27HU11	7	7	1
FF85RY01	6	5	4
LL07GE07	6	6	2
NR50KR05			
OP51BS10			
ER43ER01	6	2	4
ER03ER07			
SI58GH05			
ST39LL06	6	4	4
NZ61EZ06	6	6	1
IS91LE03	6	6	4
ER46CK07	2	1	6
TH95TE11	4	4	4
CE30RY07	6	6	2
PP76ER09			
ON53TE11			
EN59BE01			
TH39IS04			
TO72KE09	3	2	6
NE37TZ10	7	7	1
ES96RS09			
KI89PA01	5	3	4
RI92EN11	6	6	2
JO39HL10			
SI07CI08			
OX89MS10	6	6	2
YD68TH09	6	6	1
BA31AN08	7	6	1
ST89AM11			
MS62LD08	7	7	1
IS08TS05	7	6	1
AN67AL11	6	6	2
ER35ER05	6	6	2
SH02EY04	5	5	3
LY13IN09	7	6	1
RU43BU02	6	6	2
EM58ER09	6	6	1
AN70TH03	4	4	4
OX59LL12	2	1	4
ER82SH04	6	6	2
US22RD02	5	5	3
RS94SH05	6	5	2
US59ER11	6	6	1
BO20LL09	6	5	2
ER53LL10	4	4	3

CodeID	Q62	Q65	Q69 [R]
KL02US10	5	5	3
RL49LS06	5	4	5
US67LL06			
OW56RE12	6	6	2
RS27RT01	6	6	2
EK59OD06			
ER03ER10	7	6	1
HA07ER09			

### Individual – Turnover Intentions

CodeID	Q60 [R]	Q70 [R]	Q75 [R]	Q77 [R]
EN90ER11	1	4	4	1
ER58ON01	1	1	1	1
MS41EY07	2	7	2	7
LE24SO01	2	2	2	2
ER00EN11	5	3	3	5
LL91TH12	1	1	1	1
ER15AN02	1	1	1	1
LE23ER11	2	4	2	2
ME19ES05	1	2	2	2
DS55RN04	2	1	1	3
ER55CE03	1	2	2	2
FT69ER02	1	1	1	1
AR29LE03	6	6	3	5
WI57KE01	1	4	2	2
LL61KE12	1	1	1	1
AR46RN06	1	1	1	1
LY92ER09	1	2	1	1
TH01IN02	2	2	2	2
	5	4	4	5
NN02IS09	5	4	4	6
	1	2	1	1
NS39MS03	1	1	4	4
ER03ON10	2	2	2	2
ER10ER02	1	1	1	1
OD16TT11	2	2	5	2
TH49GE01	1	2	2	2
BA17TT10	1	5	4	2
MA41AD07	1	3	2	2
TH35ER05	6	1	6	2
LE68ER11	1	1	1	1
HU26TS06	1	1	1	1
IS42IS10	1	3	2	2
	1	1	1	1
ER97ST11	2	2	2	1
ON63NS02	2	2	2	2
PP41IS05	3	4	4	4
MI63EN02	1	1	1	1
NG42ON04	1	1	1	1
VE84EL05	2	2	2	2
RT07ER09	1	1	1	1
RY26ON05	1	1	1	1
EY27EP02	1	1	1	2

CodeID	Q60 [R]	Q70 [R]	Q75 [R]	Q77 [R]
MS62LD08	1	1	1	1
NE45US03	1	2	2	2
ER35ER05	1	2	1	1
RY16AU12	5	3	2	5
JO54EN02	3		3	3
WE48RK08	1	1	1	1
	1	4	3	4
RS27RT01	1	2	2	1
GH95OR12	1	5	1	2
TT20LA06	1	3	1	1
AN34CE07	1	1	1	1
	2	7	5	3
AN46TT10	1	1	1	1
EY51HI09	3	3	3	3
WO80CH01	2	2	2	2
	1	6	4	2
UM37ER11	4	4	4	3
IS75ER06	2	1	1	2
BB30ER04	2	2	1	2
AN33LT07	2	2	2	2
CM01ON01	1	1	3	1
NS30CK08	1	1	1	1
EU12ER02	1	2	2	3
SU77EE03	5	6	5	2
ER50ER07	1	1	1	1
LS58IZ08	1	4	2	2
RO53KI08	4	4	4	4
RE46CK09				
AD38ER10				
DA22NK05	4	6	3	4
KR04EN04	1	1	6	2
RA20GR06	5	5	4	5
ZE56CE11				
AN97RT07				
JU46TT10	1	1	2	2
LS99LL07	1	2	1	1
NS46ND09	1	1	1	1
KI89ER12	1	1	1	1
AK12KY07	3	5	4	4
WN97AN05				
ON89EL11				
BA31DR12				
ER14NS11				
OR23ER03				

CodeID	Q60 [R]	Q70 [R]	Q75 [R]	Q77 [R]
IN14CH07	2	2	1	1
BS61ER02				
LK46LK03	3	5	2	3
CE46RA09	2	2	2	2
TH79TH08	6	6	6	6
WN45ER12	1	1	3	4
RO69NO12				
HA27HU11	1	1	1	1
FF85RY01	1	1	1	1
LL07GE07	2	2	2	2
NR50KR05				
OP51BS10				
ER43ER01	1	6	7	1
ER03ER07				
SI58GH05				
ST39LL06	4	4	4	4
NZ61EZ06	1	2	2	2
IS91LE03	7	7	7	7
ER46CK07	6	6	6	6
TH95TE11	4	3	3	4
CE30RY07	6	1	2	2
PP76ER09				
ON53TE11				
EN59BE01				
TH39IS04				
TO72KE09	1	6	5	2
NE37TZ10	1	1	1	1
ES96RS09				
KI89PA01	4	4	3	4
RI92EN11	1	1	1	1
JO39HL10				
SI07CI08				
OX89MS10	1	4	5	5
YD68TH09	1	1	1	1
BA31AN08	1	1	1	2
ST89AM11				
MS62LD08	1	1	1	1
IS08TS05	1	1	1	1
AN67AL11	1	1	1	1
ER35ER05	1	1	1	1
SH02EY04	3	3	3	3
LY13IN09	1	2	2	1
RU43BU02	1	1	1	1
EM58ER09	1	1	1	1

CodeID	Q60 [R]	Q70 [R]	Q75 [R]	Q77 [R]
AN70TH03	4	4	4	4
OX59LL12	7	7	7	7
ER82SH04	3	2	2	2
US22RD02	2	3	3	2
RS94SH05	4	2	5	6
US59ER11	1	2	2	2
BO20LL09	3	2	2	2
ER53LL10	5	6	6	4
KL02US10	2	2	2	5
RL49LS06	5	5	5	5
US67LL06				
OW56RE12	2	2	2	2
RS27RT01	1	1	1	1
EK59OD06				
ER03ER10	1	2	1	1
HA07ER09				

## Individual – Change Anxiety

CodeID	Q18 [R]	Q52 [R]	Q56 [R]
EN90ER11	1	5	2
ER58ON01	4	1	1
MS41EY07	2	2	4
LE24SO01	2	2	2
ER00EN11	3	4	4
LL91TH12	5	5	5
ER15AN02	3	2	3
LE23ER11	6	4	4
ME19ES05	2	3	4
DS55RN04	2	2	2
ER55CE03	5	2	2
FT69ER02	3	2	1
AR29LE03	6	5	5
WI57KE01	5	3	4
LL61KE12	3	4	3
AR46RN06	2	1	1
LY92ER09	4	2	3
TH01IN02	1	2	2
	3	3	4
NN02IS09	3	2	3
	3	3	2
NS39MS03	1	1	1
ER03ON10	4	2	5
ER10ER02	2	1	2
OD16TT11	2	2	2
TH49GE01	7	4	3
BA17TT10	2	2	3
MA41AD07	4	2	2
TH35ER05	2	1	3
LE68ER11	3	1	
HU26TS06	6	2	2
IS42IS10	5	2	2
	4	2	3
ER97ST11	2	2	2
ON63NS02	2	4	4
PP41IS05	2	2	3
MI63EN02	5	2	2
NG42ON04	4	2	2
VE84EL05	6	4	3
RT07ER09	4	2	2
RY26ON05	2	4	2
EY27EP02	3	3	3
MS62LD08	4	5	2
NE45US03	2	2	3

CodeID	Q18 [R]	Q52 [R]	Q56 [R]
ER35ER05	2	2	2
RY16AU12	5	6	4
JO54EN02	4	4	5
WE48RK08	2	2	2
	4	2	3
RS27RT01	1	1	1
GH95OR12	4	3	2
TT20LA06	4	2	3
AN34CE07	3	2	1
	4	3	3
AN46TT10	4	2	4
EY51HI09	3	2	3
WO80CH01	2	2	3
	4	4	4
UM37ER11	7	5	6
IS75ER06	3	3	5
BB30ER04	4	3	2
AN33LT07	2	2	2
CM01ON01	2	1	1
NS30CK08	4	3	3
EU12ER02	2	3	2
SU77EE03	1	1	1
ER50ER07	3	2	6
LS58IZ08	2	2	2
RO53KI08	1	1	1
RE46CK09	5		
AD38ER10			
DA22NK05	4	2	4
KR04EN04	1	1	1
RA20GR06	2	2	2
ZE56CE11			
AN97RT07	4		
JU46TT10	4	1	5
LS99LL07	1	1	7
NS46ND09	6	1	1
KI89ER12	1	2	2
AK12KY07	4	4	3
WN97AN05			
ON89EL11			
BA31DR12			
ER14NS11	5		
OR23ER03			
IN14CH07	1	2	2
BS61ER02			
LK46LK03	5	2	3
CE46RA09	3	2	3
TH79TH08	3	2	2

CodeID	Q18 [R]	Q52 [R]	Q56 [R]
WN45ER12	6	7	7
RO69NO12			
HA27HU11	7	1	1
FF85RY01	4	3	2
LL07GE07	2	2	2
NR50KR05	4		
OP51BS10			
ER43ER01	4	2	2
ER03ER07			
SI58GH05			
ST39LL06	3	7	2
NZ61EZ06	5	2	2
IS91LE03	1	1	1
ER46CK07	2	2	3
TH95TE11	5	3	3
CE30RY07	2	1	2
PP76ER09	5		
ON53TE11			
EN59BE01	3		
TH39IS04	4		
TO72KE09	3	3	3
NE37TZ10	4	4	4
ES96RS09			
KI89PA01	3	1	2
RI92EN11	1	2	1
JO39HL10			
SI07CI08			
OX89MS10	6	2	2
YD68TH09	2	2	2
BA31AN08	2	1	1
ST89AM11			
MS62LD08	4	2	1
IS08TS05	4	2	2
AN67AL11	4	2	4
ER35ER05	2	2	2
SH02EY04	4	3	4
LY13IN09	6	3	2
RU43BU02	2	4	3
EM58ER09	3	2	2
AN70TH03	6	5	2
OX59LL12	6	3	5
ER82SH04	5	4	5
US22RD02	4	4	3
RS94SH05	2	6	3
US59ER11	3	2	2
BO20LL09	3	4	3
ER53LL10	5	2	1

CodeID	Q18 [R]	Q52 [R]	Q56 [R]
KL02US10	5	5	4
RL49LS06	5	5	5
US67LL06			
OW56RE12	1	1	1
RS27RT01	1	1	1
EK59OD06			
ER03ER10	4	2	2
HA07ER09	6	2	2

## Demographics

Career											
	If Military, what rank? If Civilian, prior military?		Military or Civilian?		Gender		Age		Level_of_Education		Months from Retirement
		NO	YES	NO	YES	M	F	CIV	CIV	NO	YES
PROC TECH	NO	0	3	204	60	132	AD	44	F	CIV	NO
CO	YES	10	4	27	14	144	HS	55	M	CIV	YES
BUYER	NO	0		16	16	96	BD	46	F	CIV	
CO	YES	9	1	229	33	132	MD	44	M	CIV	NO
PRICER	YES	10	2	360	168	108	BD	54	M	CIV	YES
CO	NO	0	3	184	5	204	BD	45	M	CIV	NO
BUYER	NO	0	2	250	39	72	BD	56	M	CIV	YES
BUYER	NO	0	2	28	10	216	BD	24	F	MIL	1LT
BUYER	NO	0	3	30	6	360	BD	26	F	CIV	NO
BUYER	NO	0	2	32	18	480	BD	23	M	CIV	NO
CO	YES	9	3	222	24	48	MD	54	M	CIV	YES
CO	YES	5	1	120	14	96	MD	46	M	CIV	YES
ADMIN	NO	0	1	312	132	132	HS	44	F	CIV	NO
CO	YES	5	1	215	23	144	MD	43	F	CIV	NO
BUYER	NO	0		31	1	240	BD	34	M	CIV	YES
MANAGEMENT	YES	20	1	234	18	84	MD	48	F	CIV	NO
CO	NO	0	3	217	2	108	BD	46	F	CIV	NO
CO	NO	0	3	188	98	12	BD	54	M	CIV	
CO	NO	0	3	180			MD		F	CIV	NO
CO	NO	0	3	154	20	240	MD	38	M	CIV	NO
BUYER	NO	0	2	54	28	300	BD	28	M	CIV	NO
CO	YES	4	3	180	60	168	MD		M	CIV	NO
MANAGEMENT	YES	30	1	6	6	48	MD	45	M	MIL	LTC
BUYER	NO	0	3	30	12	156	BD	42	M	CIV	NO
STAFF	NO	0	3	34	1		BD	44	F	CIV	NO
CO	NO	0	3	216	36	204	BD	40	M	CIV	NO
CO	NO	0	3	240	10	168	MD	41	F	CIV	NO
CO	YES	7	4	48	48	384	MD	33	F	CIV	NO
PROC TECH	NO	0	3	169	169	288	HS	38	F	CIV	NO
PROC TECH	NO	0	3	94	94	300	HS	38	F	CIV	NO
BUYER	NO	0	3	125	9	264	MD	40	M	CIV	NO
CO	NO	0	3	34	34	132	BD	44	M	CIV	NO
MANAGEMENT	YES	22	1	347	9	36	MD	52	M	CIV	NO
CO	YES	8	2	363	6	24	MD	52	M	CIV	NO
BUYER	NO	0	4	4	4	228	MD	23	F	MIL	2LT
CO	NO	0	4	175	9	240	MD	42	M	CIV	NO
BUYER	NO	0	3	2	2	35	BD	22	F	CIV	NO
CO	NO	0	2	203		60	MD	60	M	CIV	
PRICER	NO	0	2	36	36	180	MD	41	M	CIV	NO
CO	NO	0	3	125	50	252	MD	41	F	CIV	NO

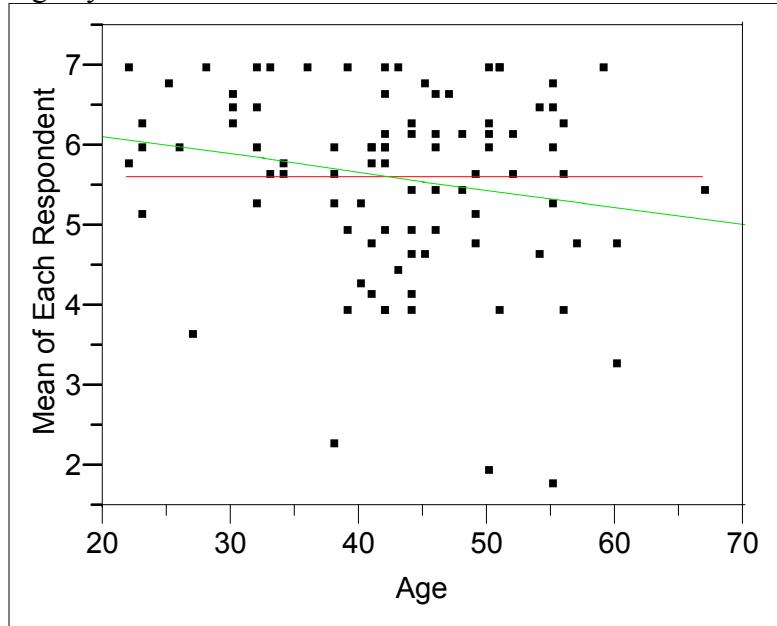
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CO	NO	0	4	204	48	84	BD	55	M	CIV	YES	
BUYER	NO	0	4	7	7	60	AD	43	M	CIV	NO	
BUYER	NO	0	4	408	40	36	BD	59	M	CIV	NO	
MANAGEMENT	YES	30	1	354	114	60	MD	54	M	CIV	NO	
BUYER	NO	0			132	BD		F	CIV	NO		
BUYER	NO	0	4	216	11	120	BD	45	F	CIV	NO	
BUYER	NO	0	5	8	8	288	MD	31	M	CIV	YES	
CO	YES	4	2	232	5	192	MD	44	M	CIV	NO	
CO	YES	3	1	192	60	72	MD	55	F	CIV	NO	
CO	NO	0	2	33	33	216	BD	49	M	CIV	YES	
STAFF	YES	25	1	28	12	96	MD	34	F	MIL	MAJ	
BUYER	NO	0	3	6	6	420	MD	30	F	CIV	NO	
PROC TECH	NO	0	4	168	24	84	BD		F	CIV	NO	
BUYER	NO	0	3	265	60	72	MD	55	M	CIV	NO	
MANAGEMENT	YES	34	1	426	70	24	MD	57	M	CIV	NO	
BUYER	NO	0	4	15	15	24	HS	60	F	CIV	NO	
BUYER	NO	0	1	222	42	96	BD	47	M	CIV	NO	
BUYER	NO	0	2	8	6	72	MD	32	M	MIL	CAPT	
CO	YES	10	3	184	29	180	MD	41	M	CIV	NO	
BUYER	NO	0	3	209	7	156	BD	48	M	CIV	NO	
BUYER	NO	0	2	4	4	168	BD	30	M	MIL	CAPT	
CO	YES			192		168	MD	42	F	CIV		
BUYER	NO	0	3	16	16	192	BD	27	M	MIL	CAPT	
BUYER	NO	0	4	108	48	D		41	F	CIV	NO	
BUYER	YES	10	3	24	24	120	MD	32	M	MIL	CAPT	
BUYER	NO			1	12	12	108		49	M	MIL	LTC
BUYER	NO		4	6	6	192	BD	25	F	MIL	1LT	
BUYER	NO			3	24	1	216	BD	49	M	CIV	YES
BUYER	NO			1	24	12	60	MD	39	M	MIL	CAPT
BUYER	NO		3	196	43	120	HS	45	F	CIV	NO	
STAFF	NO		3	0	204	180	MD	42	F	CIV	NO	
STAFF	NO		4	19	19	216	BD	23	M	MIL	2LT	
STAFF	YES	4	1	356	11	48	MD	56	M	CIV	YES	
CO	NO			3	120	24	180	MD	42	M	CIV	NO
BUYER	YES	3	1	234	0	168	MD	44	M	CIV	NO	

BUYER	NO		3	36	24	36	BD	39	M	MIL	CAPT
CO	NO		4	185	37	180	MD	38	M	CIV	NO
BUYER	NO		3	31	7	360	MD	33	F	CIV	NO
BUYER	NO		2	24	14	240	BD	42	F	CIV	NO
CO	YES	9	4	187	12	144	MD	44	M	CIV	NO
STAFF	YES	19	2	32	20	120	MD	50	M	MIL	
BUYER	NO		4	252	12	72	MD	59	F	CIV	NO
CO	YES	8	3	24	24	120	MD	32	M	MIL	MAJ
PRICER	NO		1	6	6	216	MD	43	M	CIV	NO
BUYER	NO		2	72	20	96	BD	46	F	CIV	NO
BUYER	NO		3	72	36	288	MD	32	M	CIV	NO
BUYER	NO		3	0	24	12	MD	42	F	MIL	MAJ
BUYER	NO		3	276	61	168	HS	41	F	CIV	NO
CO	YES	7	2	126	36	240	MD	41	M	CIV	NO
PROC TECH	NO		1	306	90	84	MD	50	F	CIV	NO
BUYER	NO		2	158	39	96	MD	50	M	CIV	YES
BUYER	NO		5	31	1	276	BD	30	F	CIV	YES
BUYER	NO		4	188	10	156	MD	40	F	CIV	NO
MANAGEMENT	YES	34	1	276	3	60	MD	51	F	CIV	NO
CO	NO		4	125	20	240	MD	42	F	CIV	NO
CO	NO		4	216	216	120	BD	50	M	CIV	NO
CO	NO		3	206	60	84	BD	55	M	CIV	YES
BUYER	NO		3	192	96	156	BD	41	F	CIV	NO
BUYER	NO		3	228	2	180	BD	42	F	CIV	NO
CO	NO		4	359	192	24	MD	56	M	CIV	NO
CO	NO		1	211	49	144	MD	55	M	CIV	NO
	YES	8	1	295	21	96	MD	50	M	CIV	NO
CO	NO		5	180	72	312	BD	39	M	CIV	NO
BUYER	NO		3	292	93	6	BD	67	M	CIV	NO
CO	YES	6	1	379	32	72	MD	54	M	CIV	NO
CO	NO		4	308	96	48	BD	52	M	CIV	NO
MANAGEMENT	YES	22	2	348	24	36	MD	55	M	CIV	YES
PROC TECH	NO		1	295	25	156	HS	42	F	CIV	NO
BUYER	NO		4	7	7	180	MD	42	M	CIV	YES

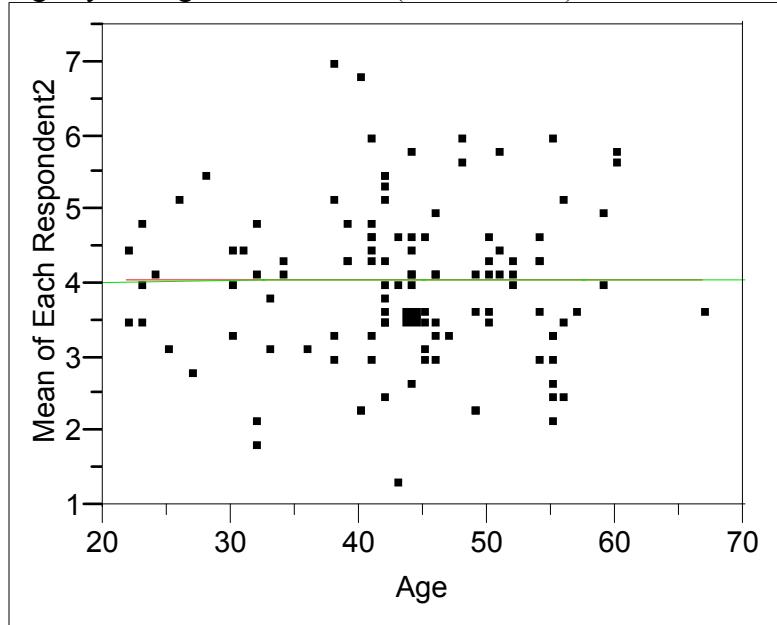
CO	NO		3	228	138	84	BD	51	M	CIV	YES
BUYER	NO		3	30	15	60	BD	49	F	CIV	NO
BUYER	NO		4	162	54	240	MD	36	F	CIV	NO
BUYER	NO		3	204	12	120	BD	46	F	CIV	NO
CO	YES	10	1	73	25	216	MD	46	M	CIV	NO

## Appendix D – Dot Plots With Lines Of Best Fit (Demographics by Variables)

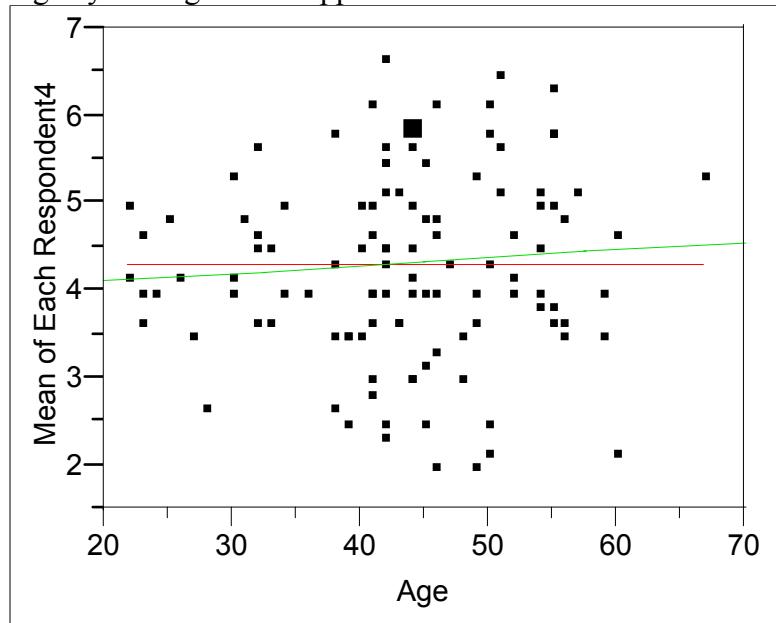
Age by Semantic Differential Scale



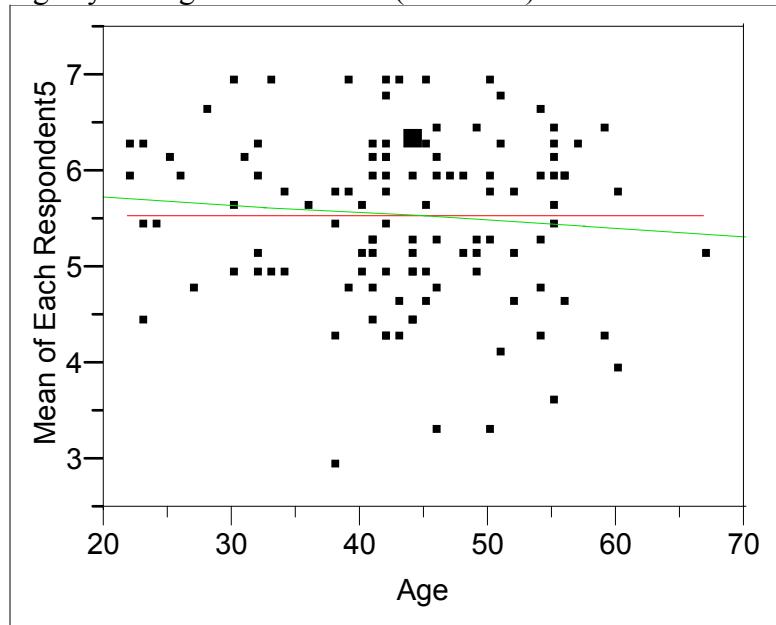
Age by Change Commitment (Continuance)



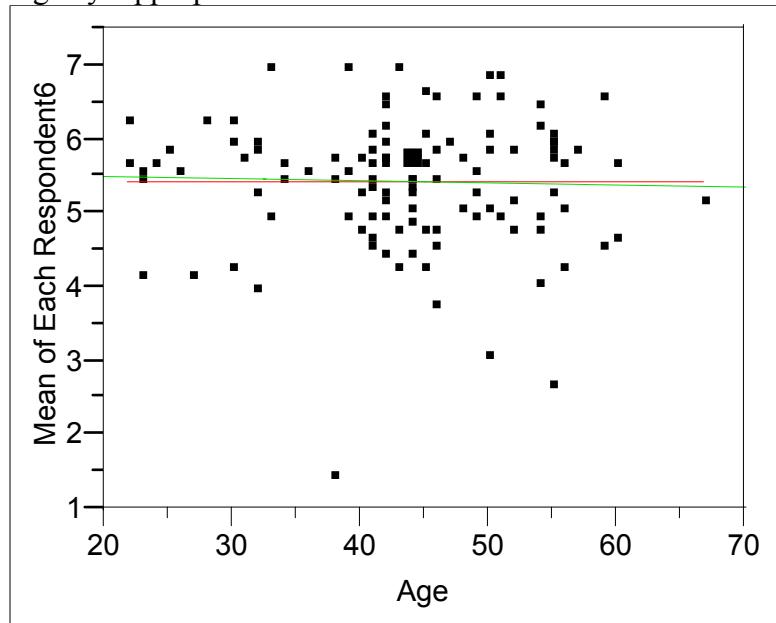
Age by Management Support



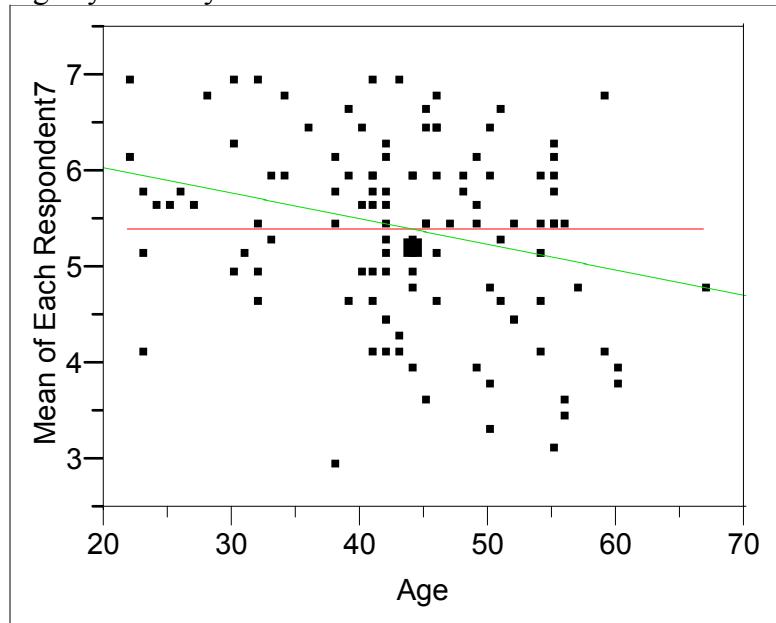
Age by Change Commitment (Affective)



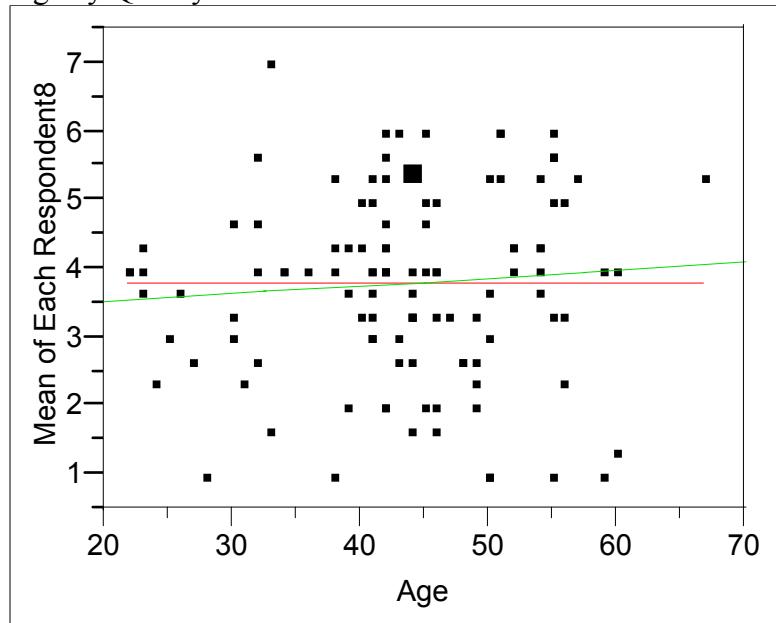
Age by Appropriateness



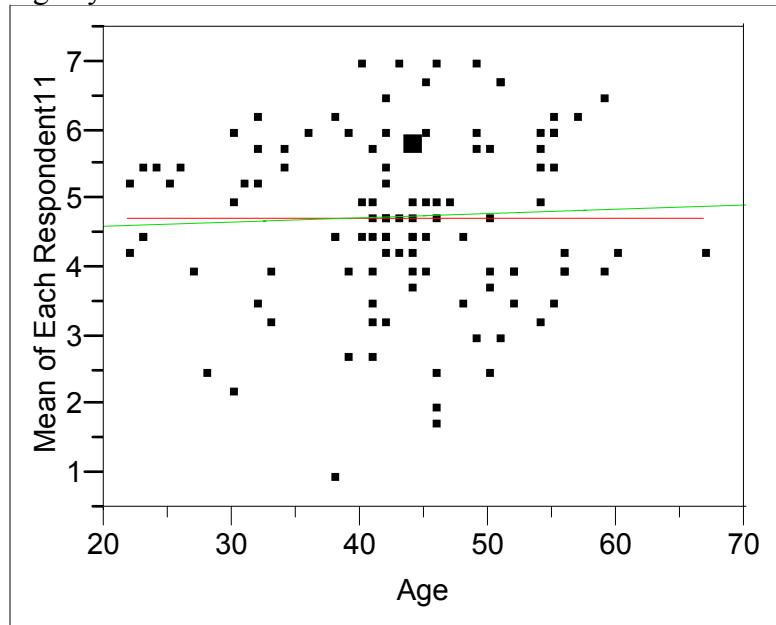
Age by Efficacy



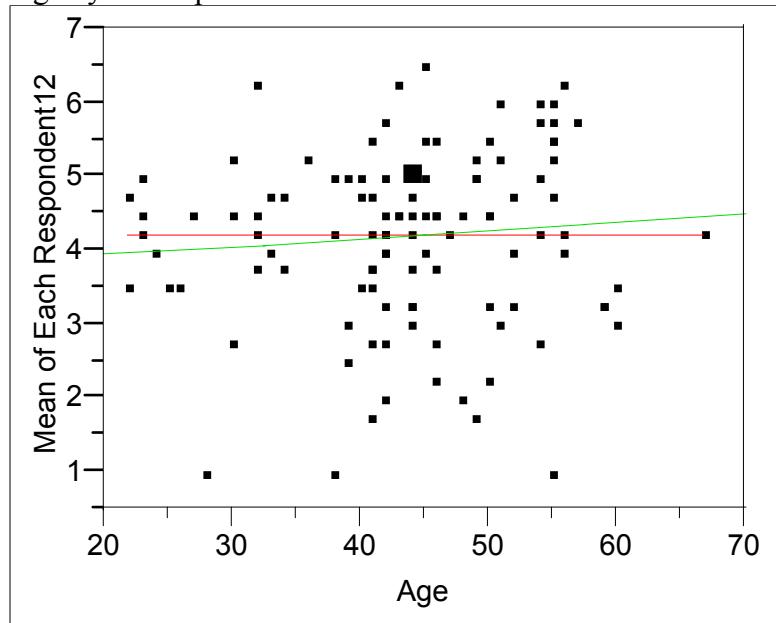
Age by Quality of Information



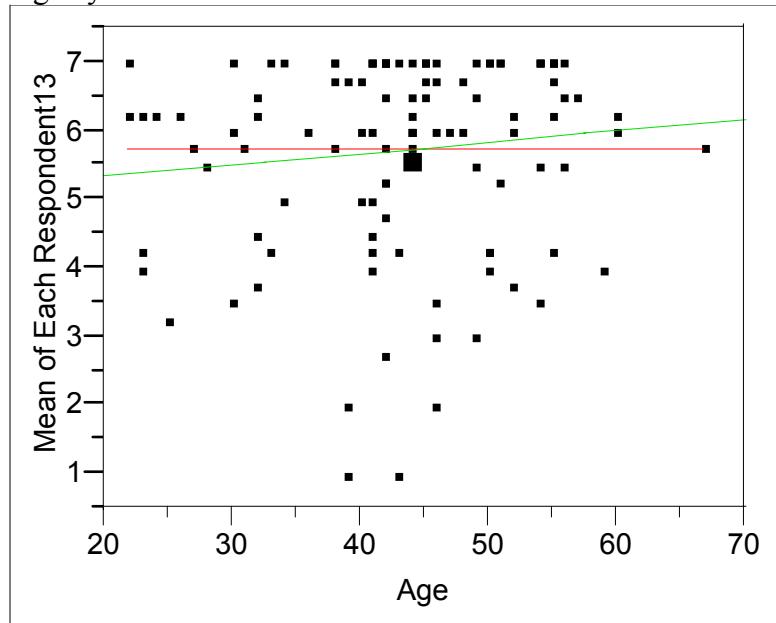
Age by Pessimism



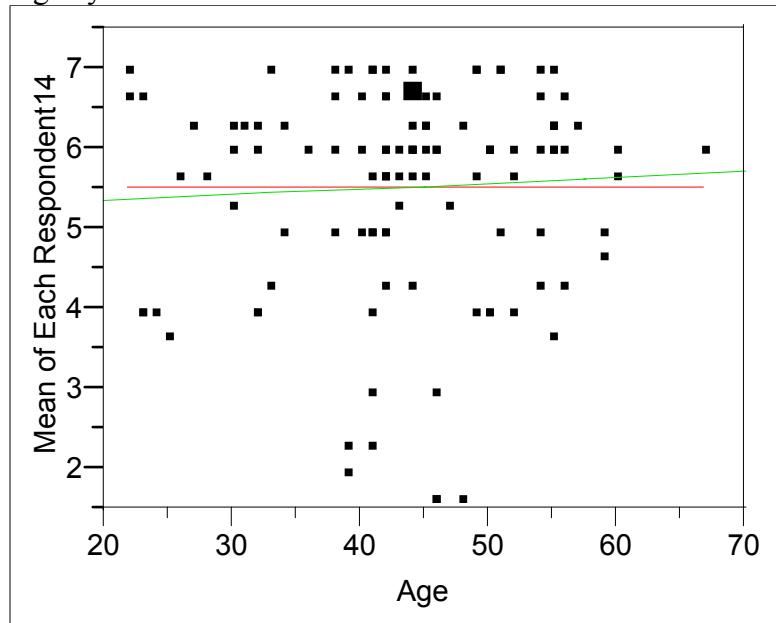
Age by Participation



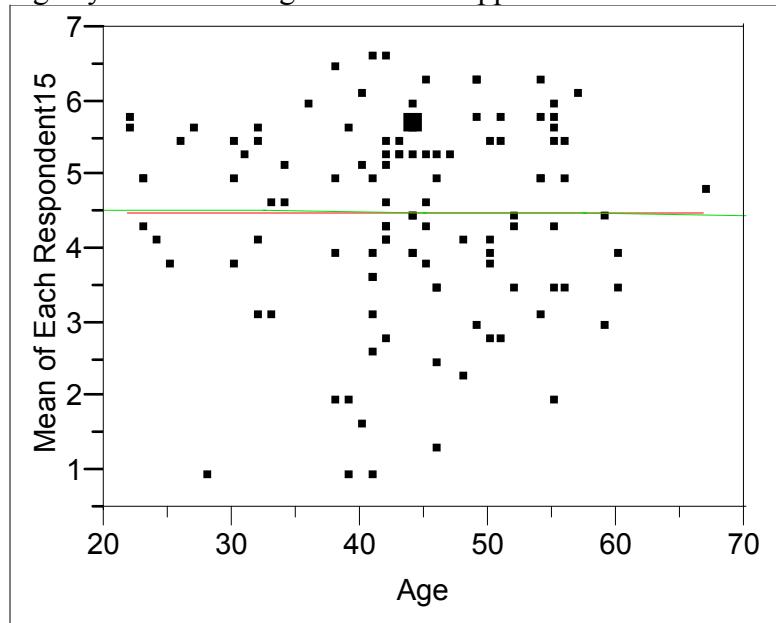
Age by Turnover Intention



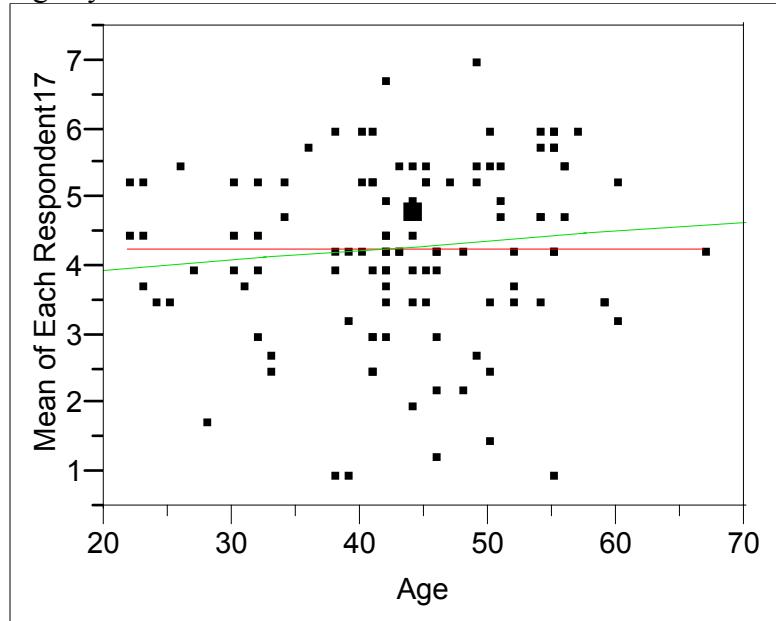
Age by Job Satisfaction



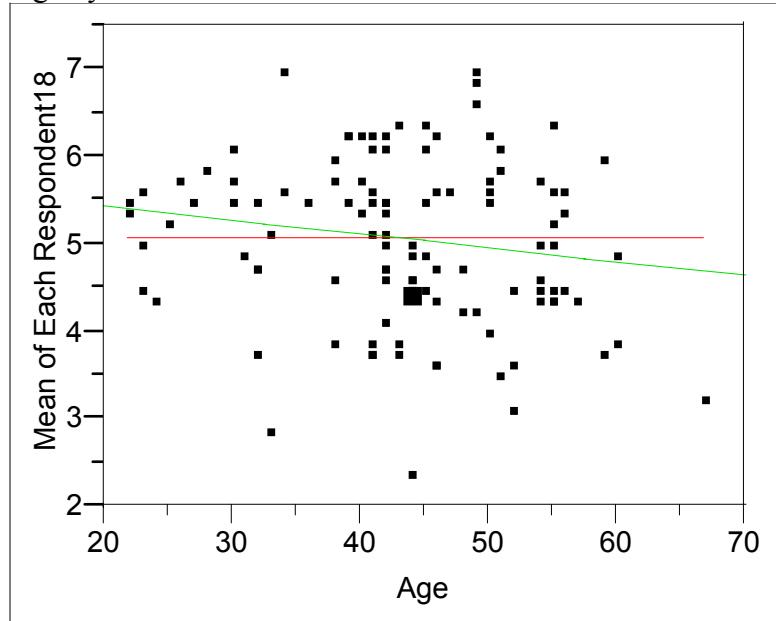
Age by Perceived Organizational Support



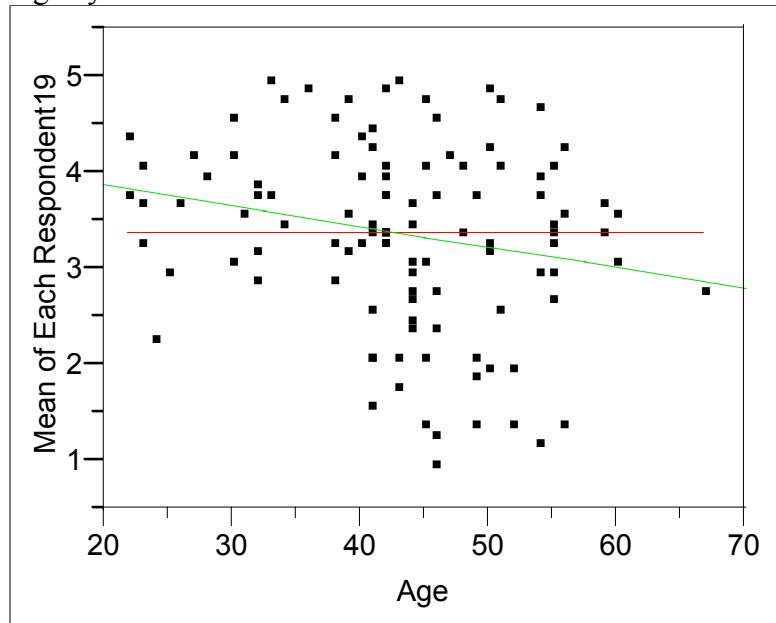
Age by Communication Climate



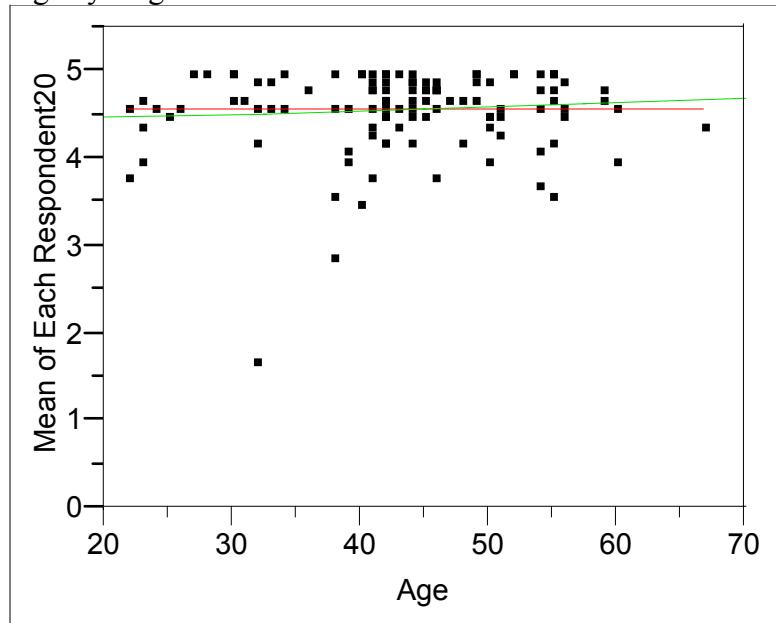
Age by Innovativeness



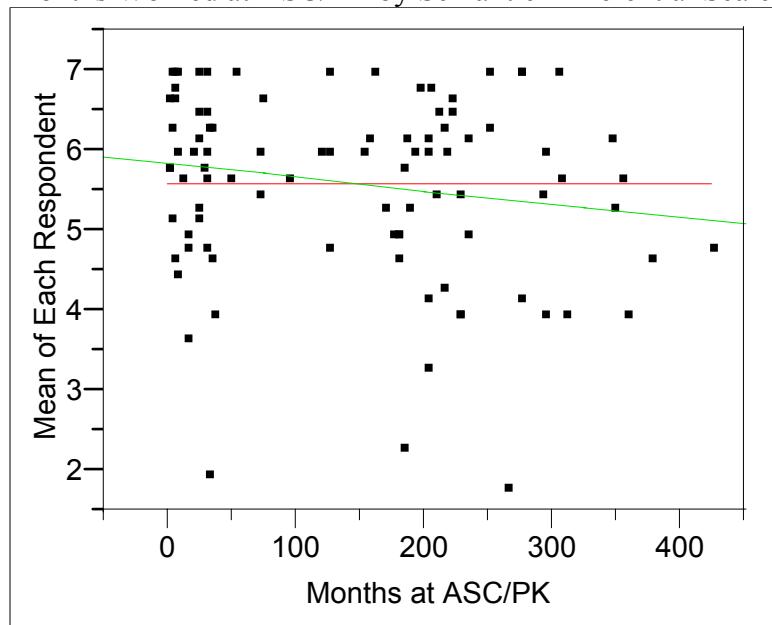
Age by Positive Affect



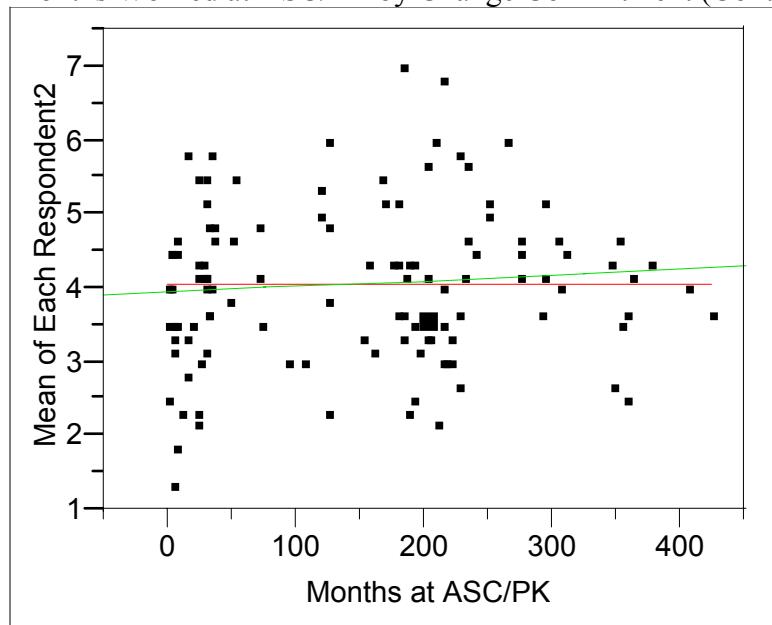
Age by Negative Affect



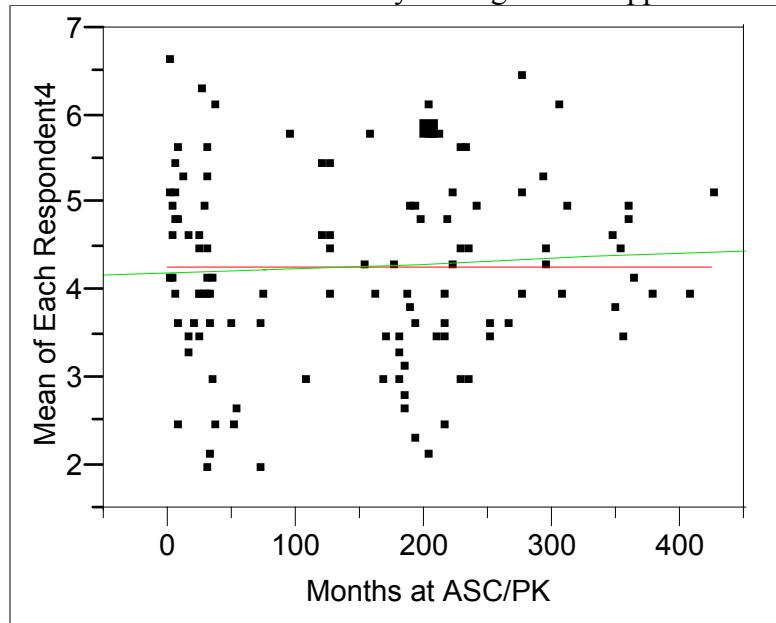
Months Worked at ASC/PK by Semantic Differential Scale



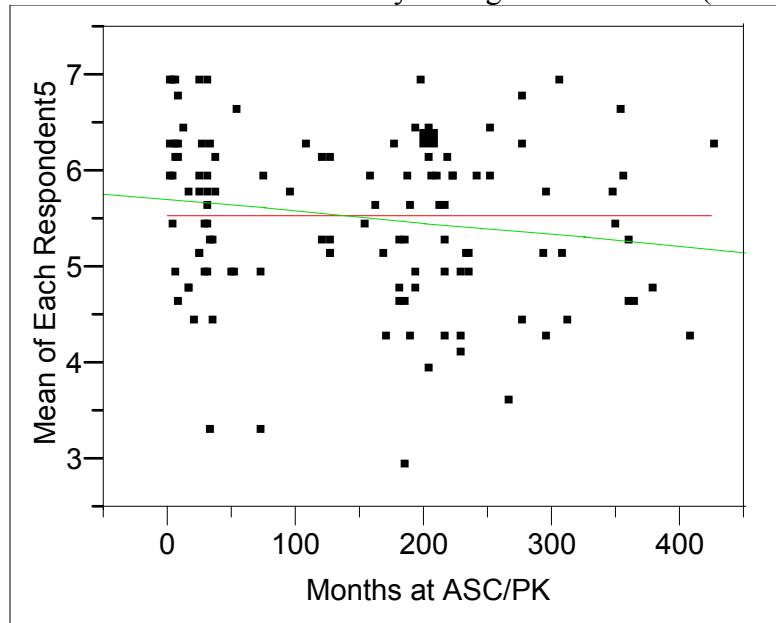
Months Worked at ASC/PK by Change Commitment (Continuance)



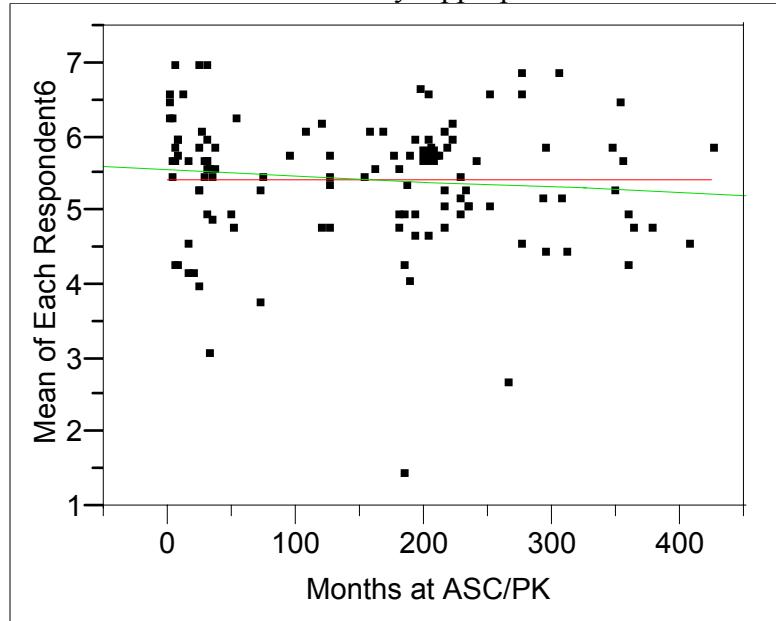
Months Worked at ASC/PK by Management Support



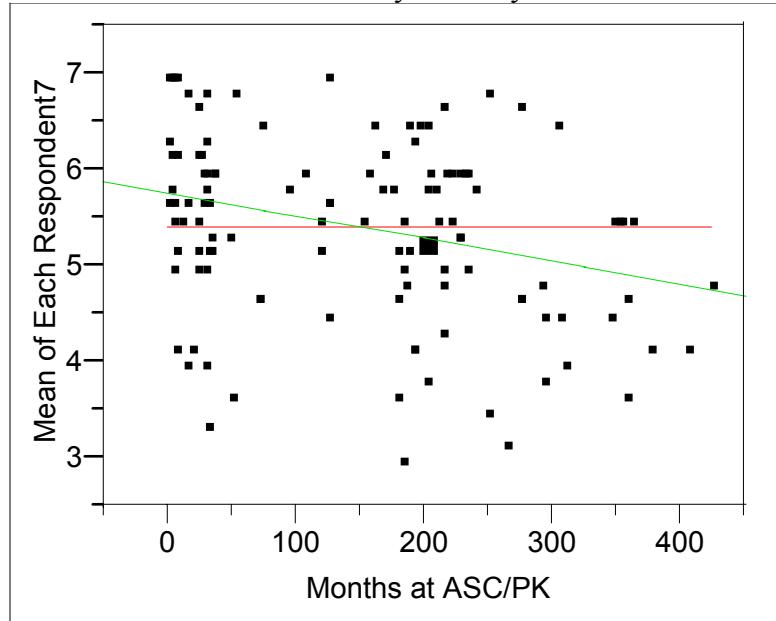
Months Worked at ASC/PK by Change Commitment (Affective)



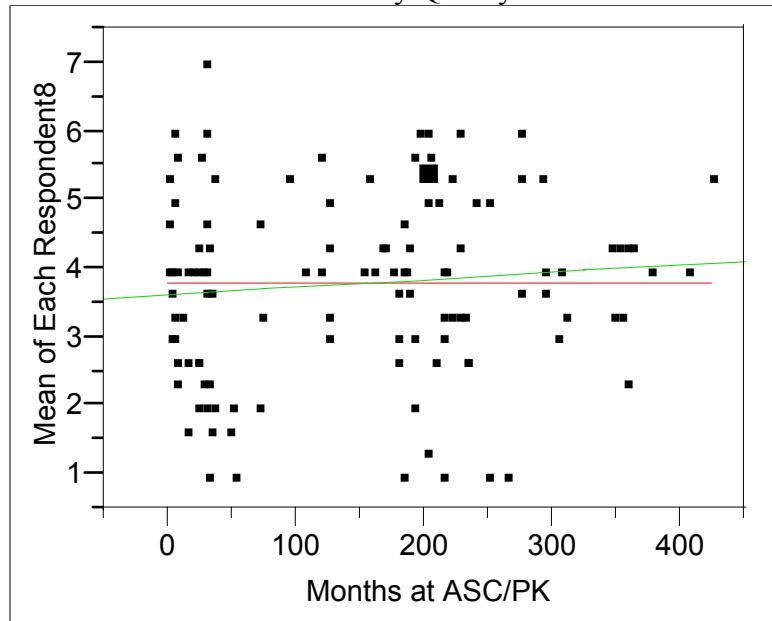
Months Worked at ASC/PK by Appropriateness



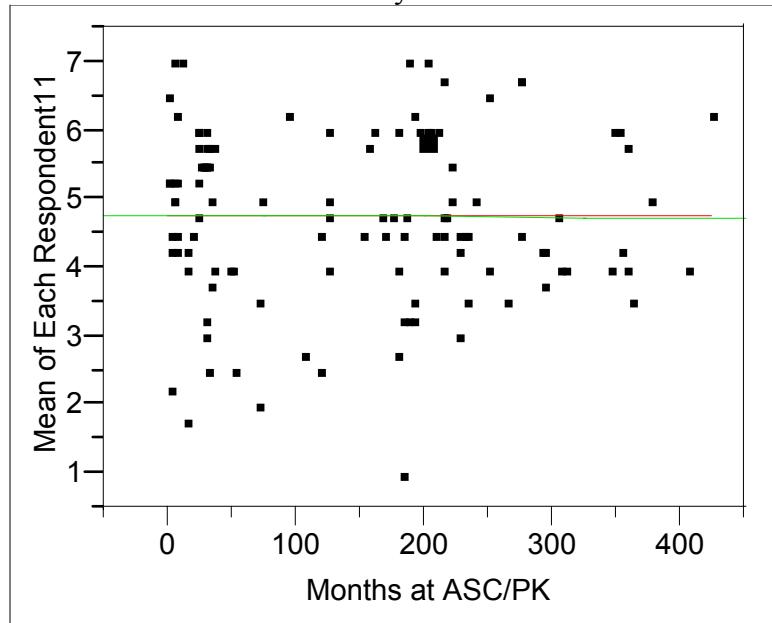
Months Worked at ASC/PK by Efficacy



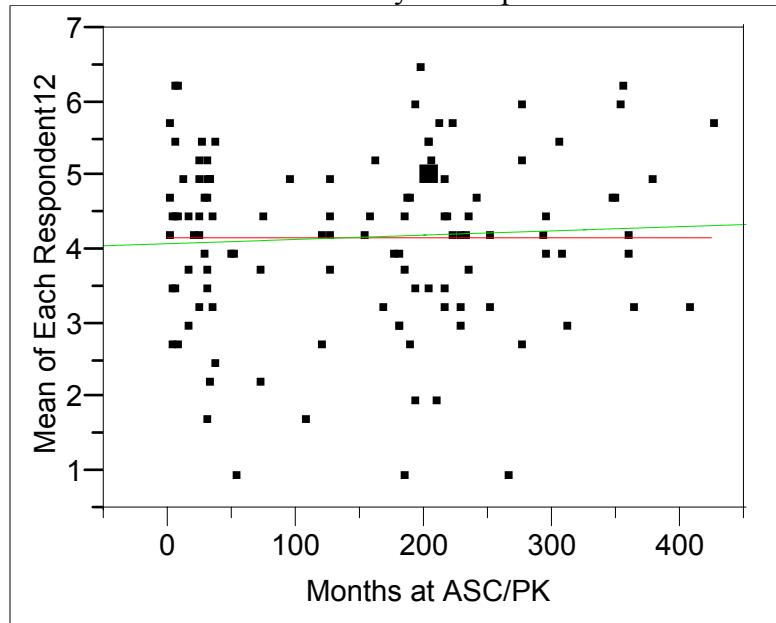
Months Worked at ASC/PK by Quality of Information



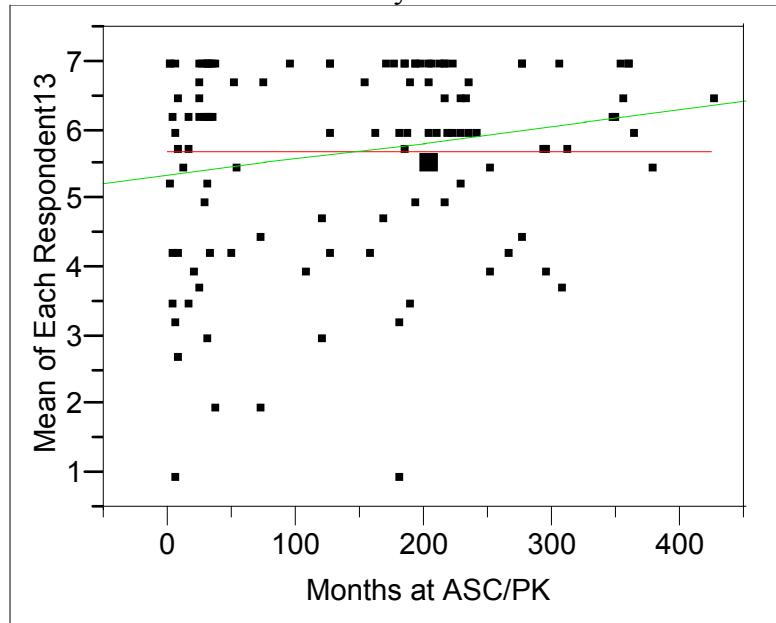
Months Worked at ASC/PK by Pessimism



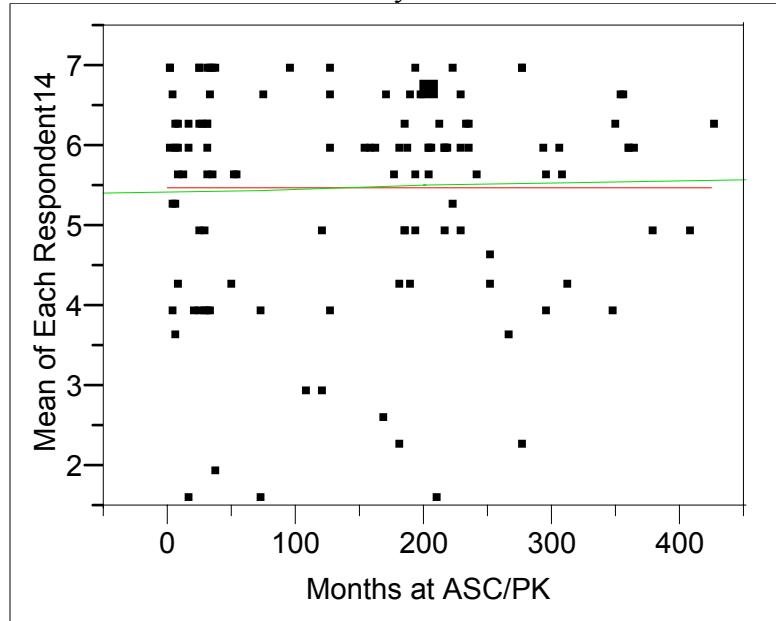
Months Worked at ASC/PK by Participation



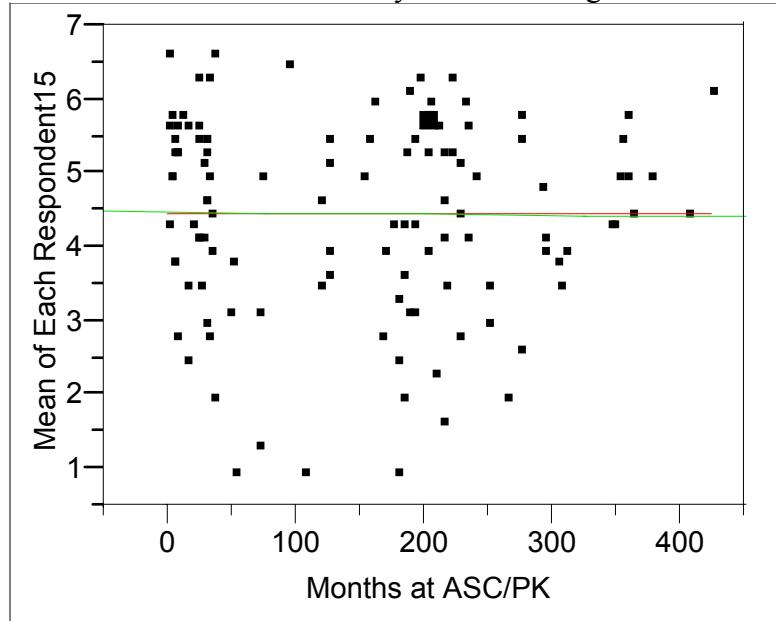
Months Worked at ASC/PK by Turnover Intention



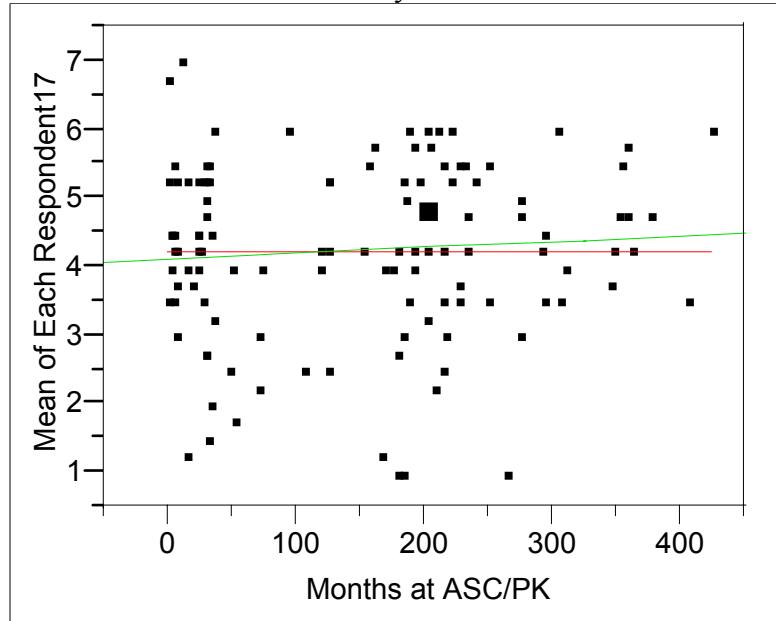
Months Worked at ASC/PK by Job Satisfaction



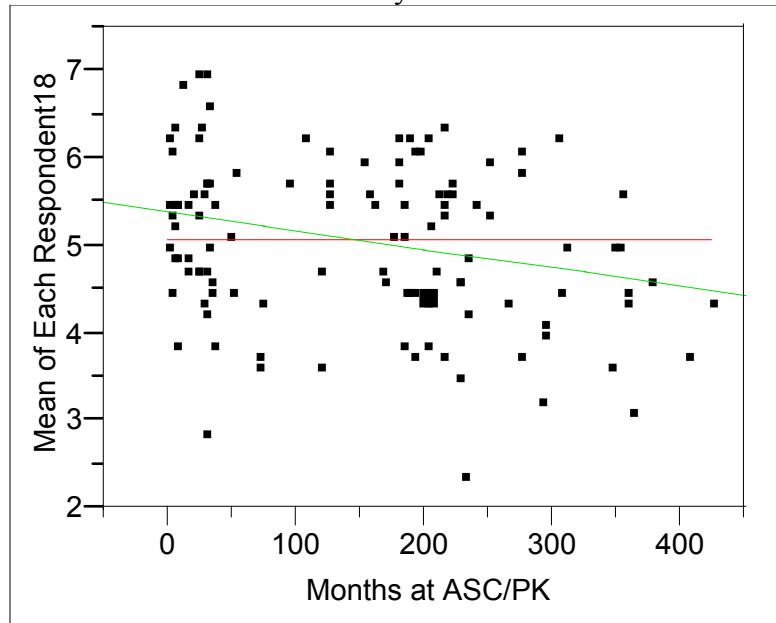
Months Worked at ASC/PK by Perceived Organizational Support



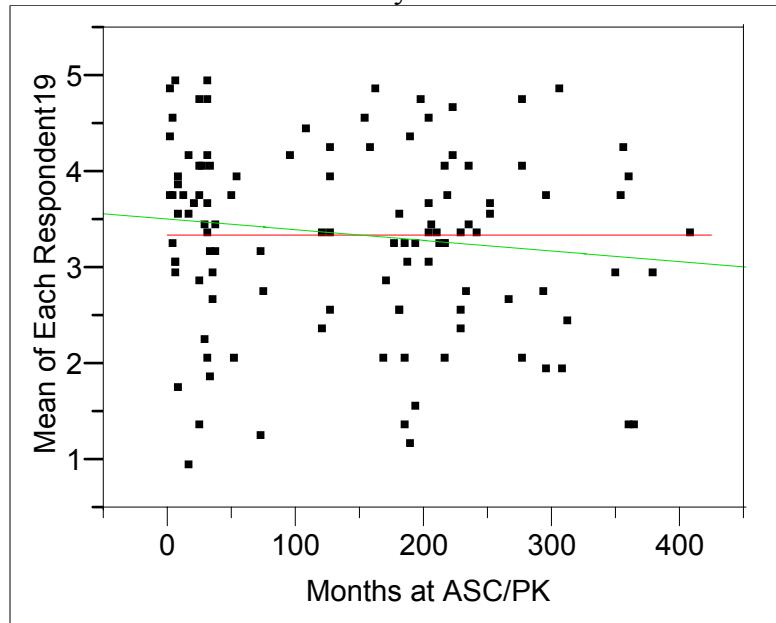
Months Worked at ASC/PK by Communication Climate



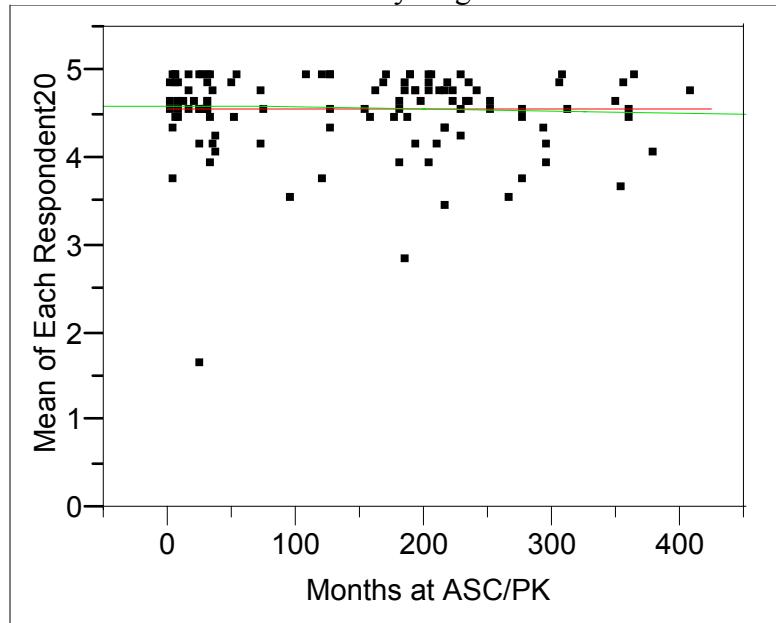
Months Worked at ASC/PK by Innovativeness



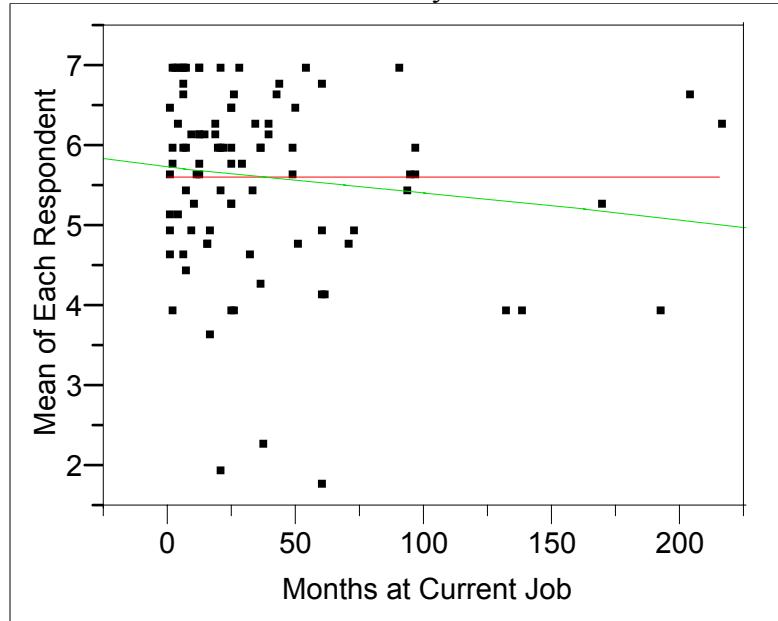
Months Worked at ASC/PK by Positive Affect



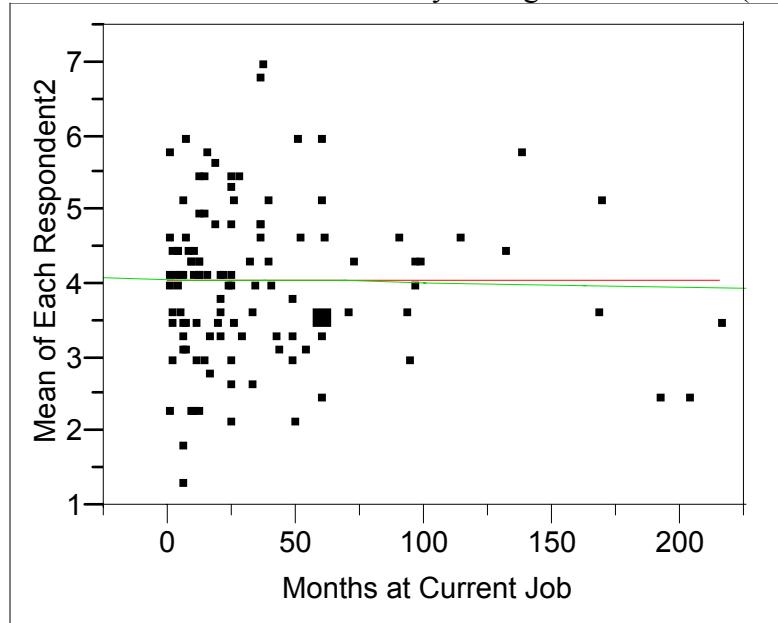
Months Worked at ASC/PK by Negative Affect



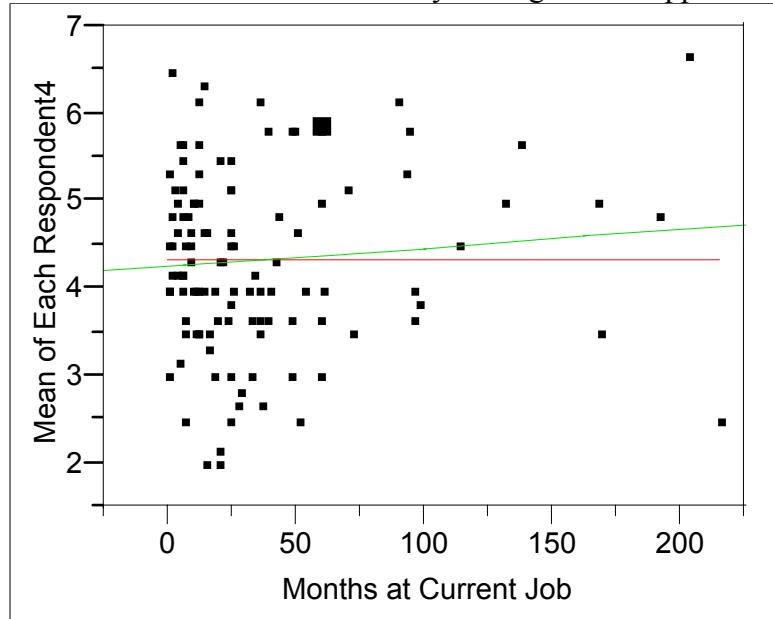
Months Worked at Current Job by Semantic Differential Scale



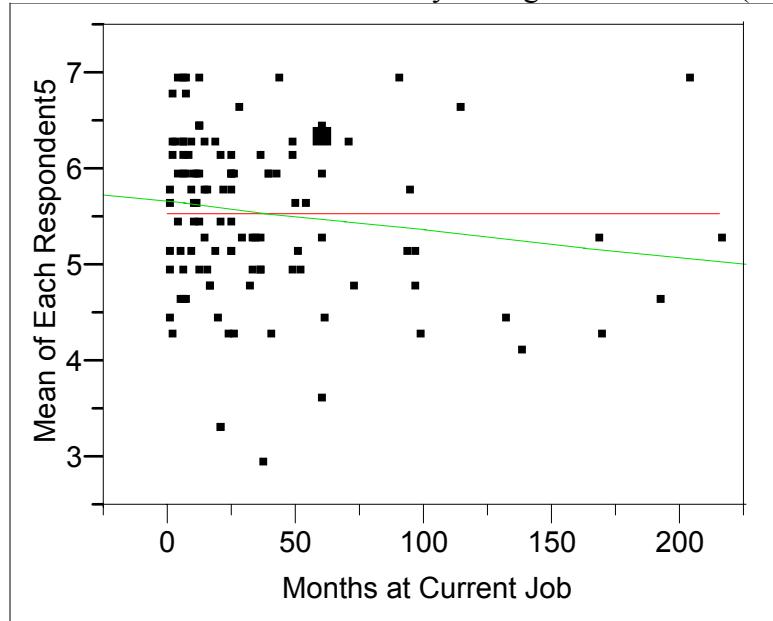
Months Worked at Current Job by Change Commitment (Continuance)



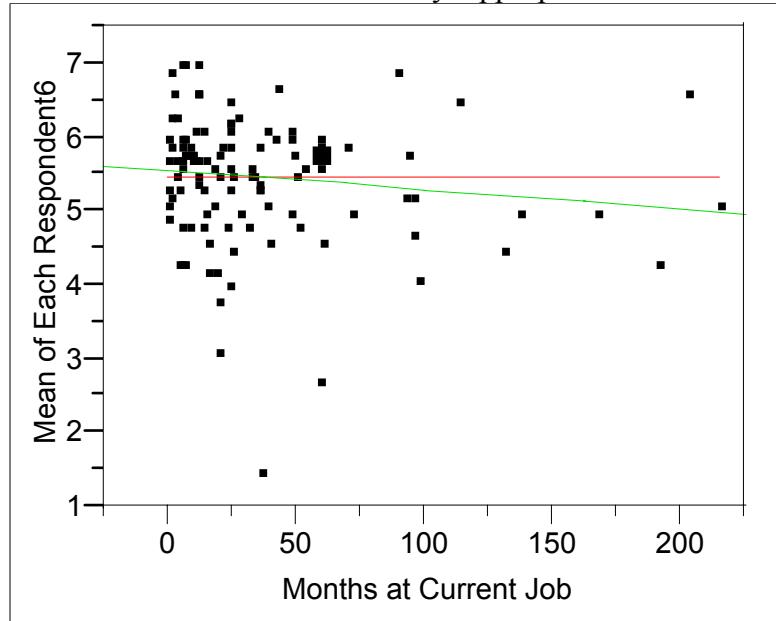
Months Worked at Current Job by Management Support



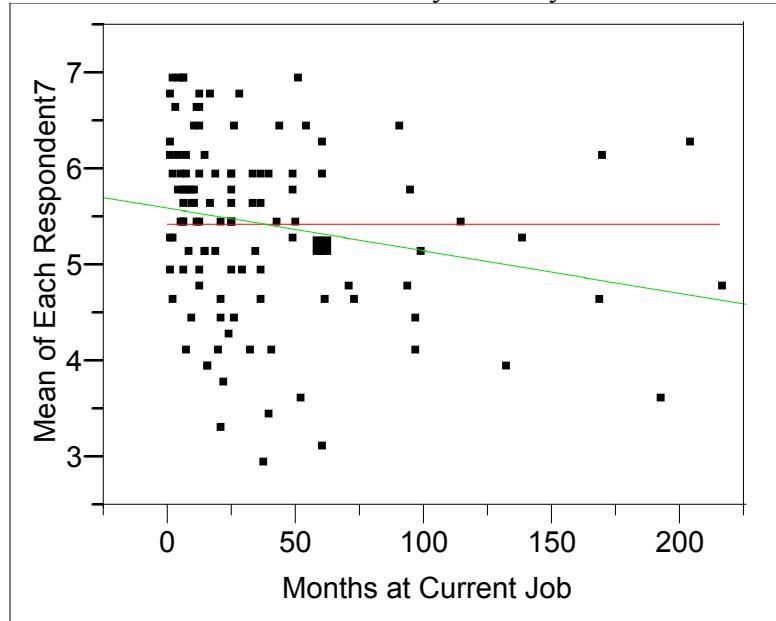
Months Worked at Current Job by Change Commitment (Affective)



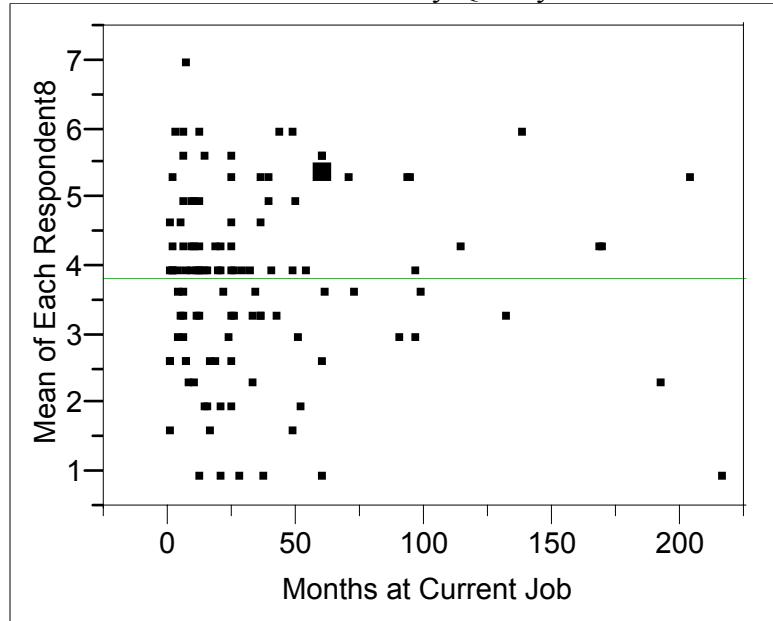
Months Worked at Current Job by Appropriateness



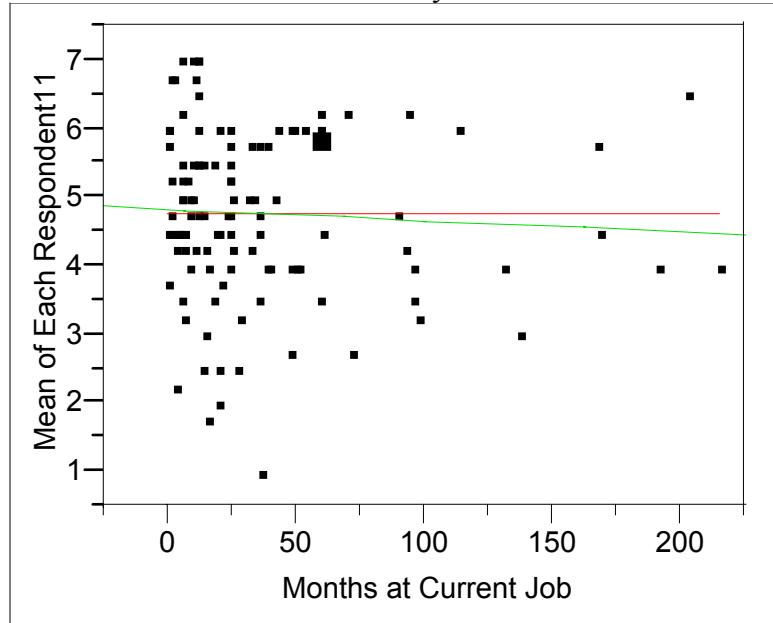
Months Worked at Current Job by Efficacy



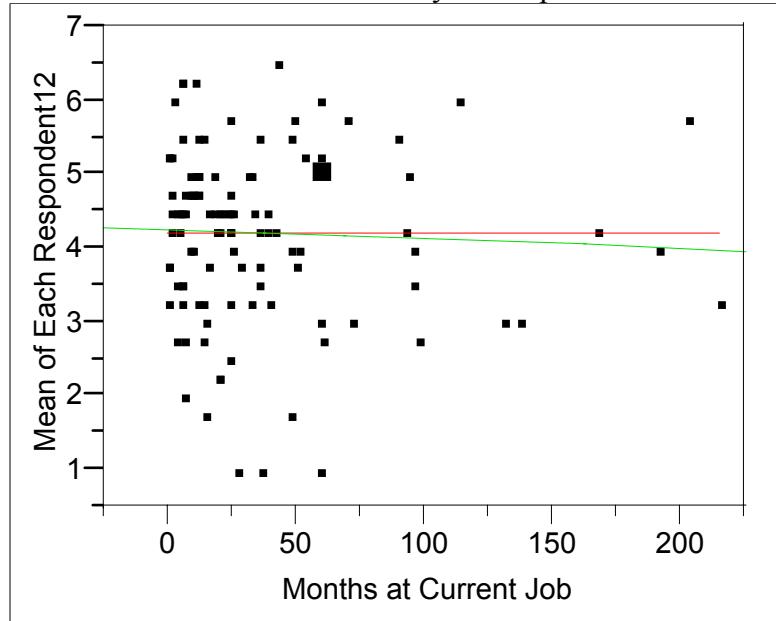
Months Worked at Current Job by Quality of Information



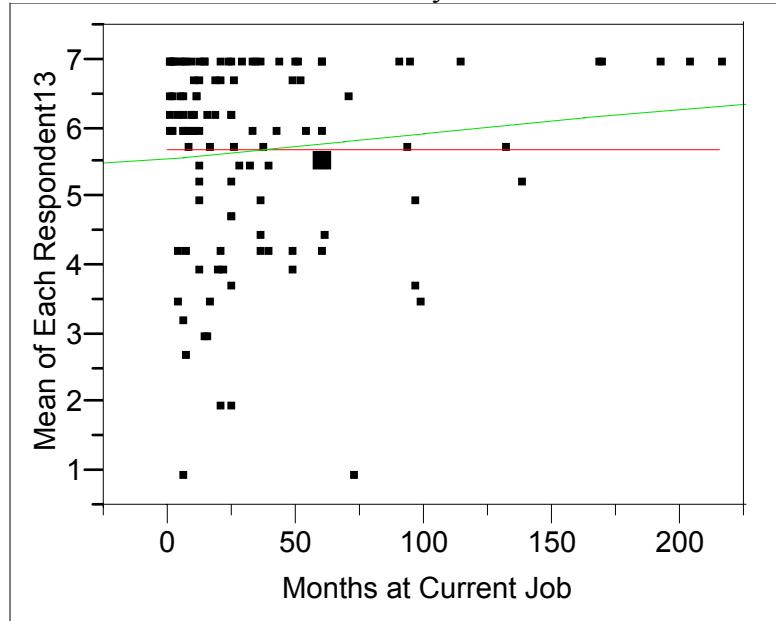
Months Worked at Current Job by Pessimism



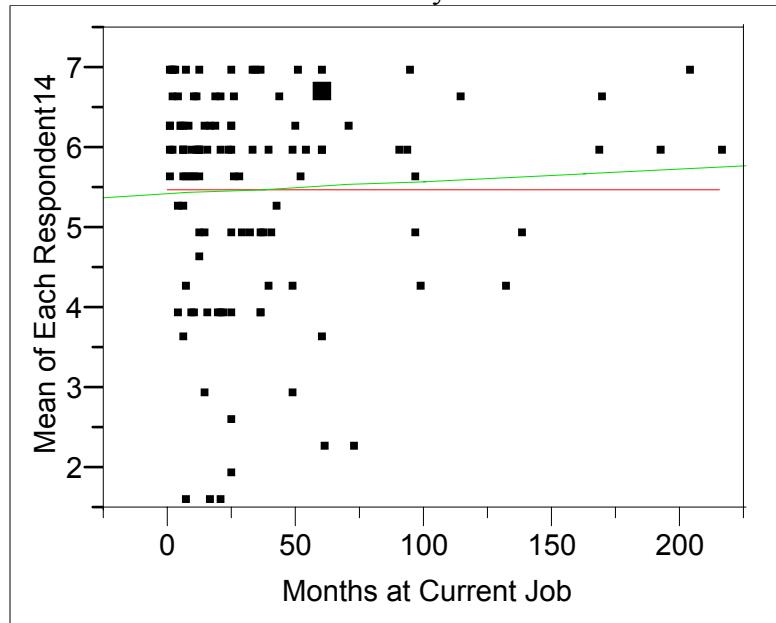
Months Worked at Current Job by Participation



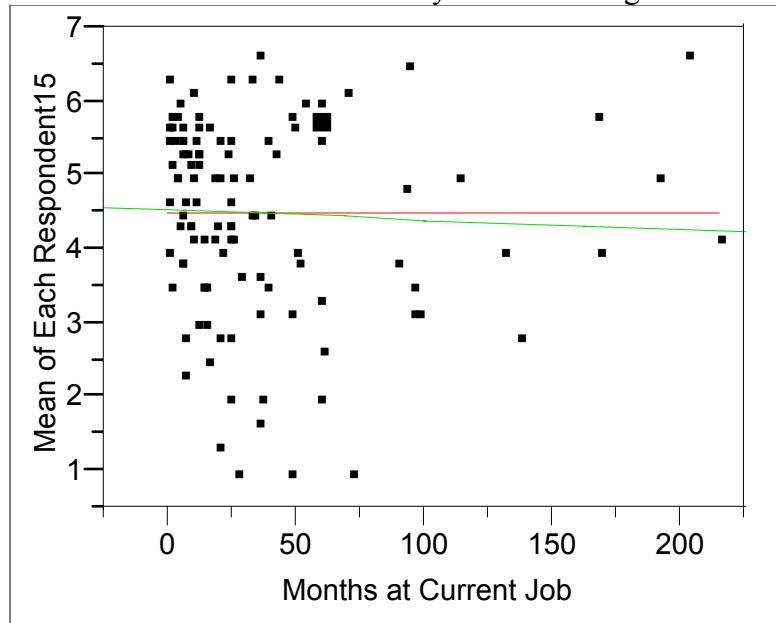
Months Worked at Current Job by Turnover Intention



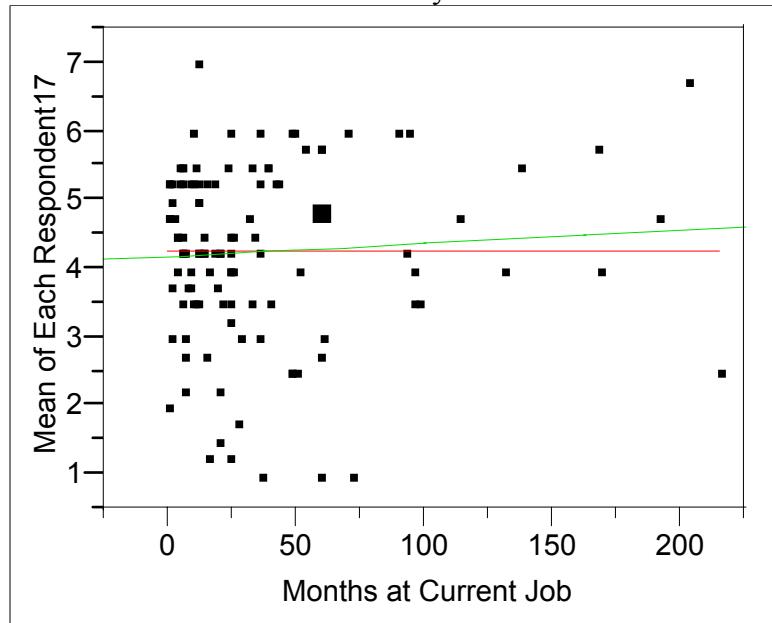
Months Worked at Current Job by Job Satisfaction



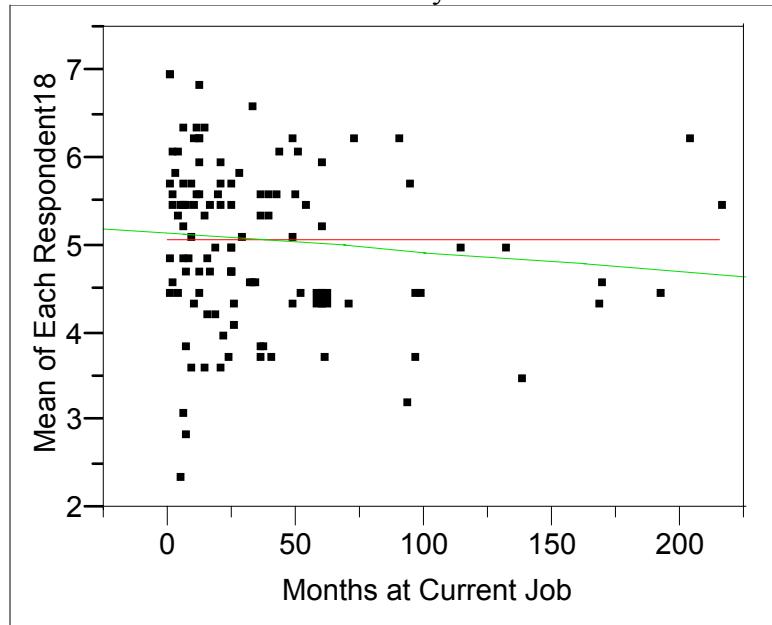
Months Worked at Current Job by Perceived Organizational Support



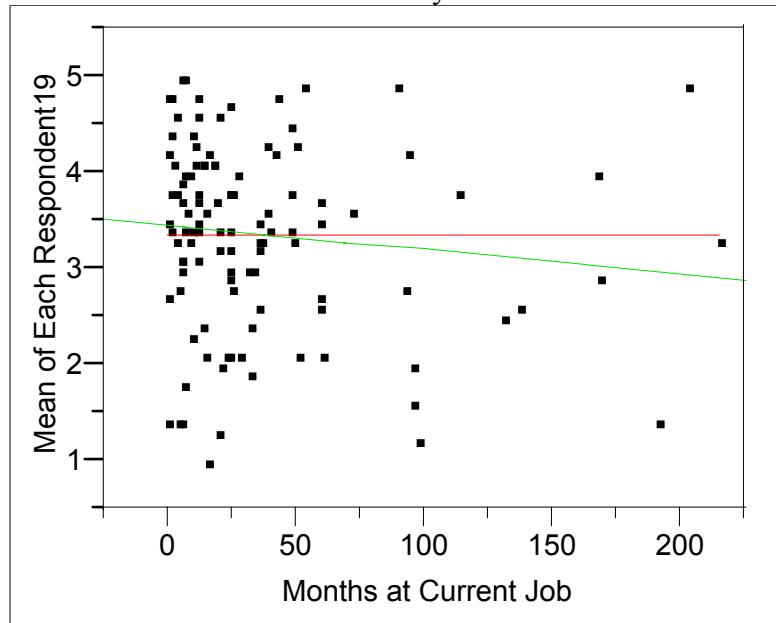
Months Worked at Current Job by Communication Climate



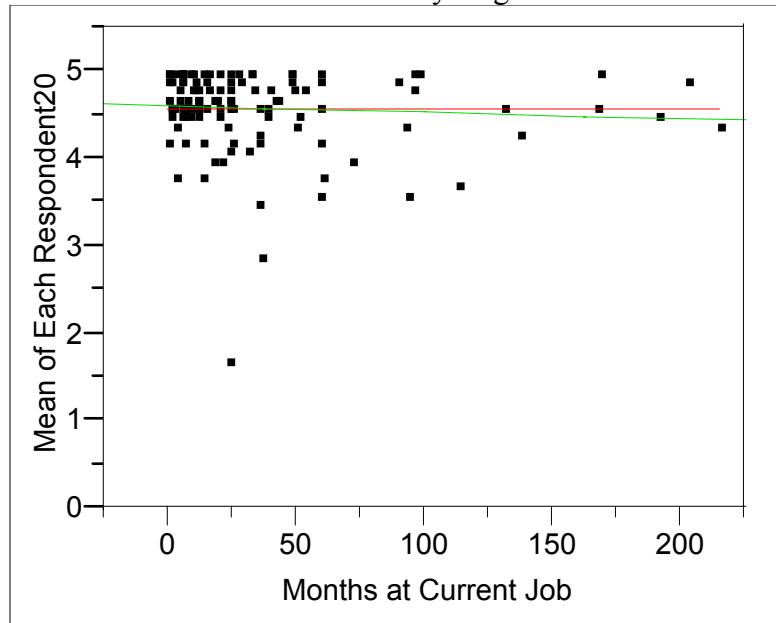
Months Worked at Current Job by Innovativeness



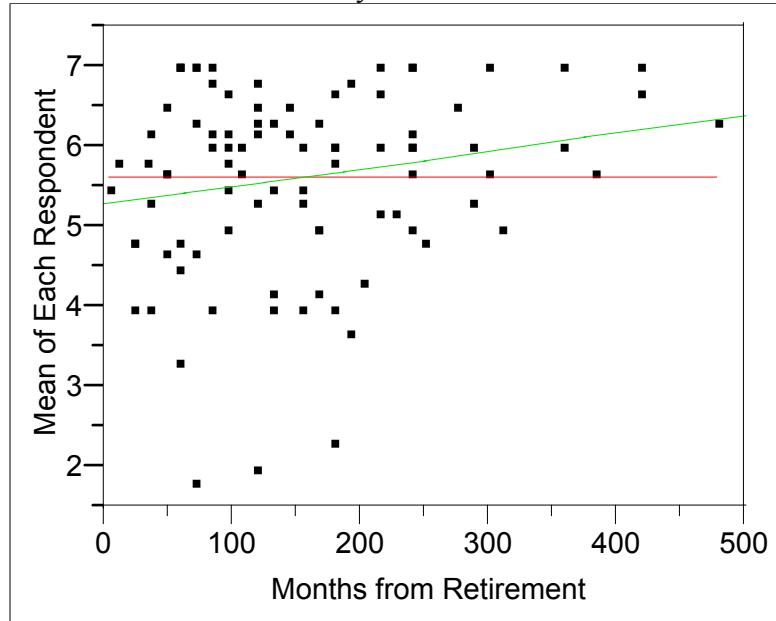
Months Worked at Current Job by Positive Affect



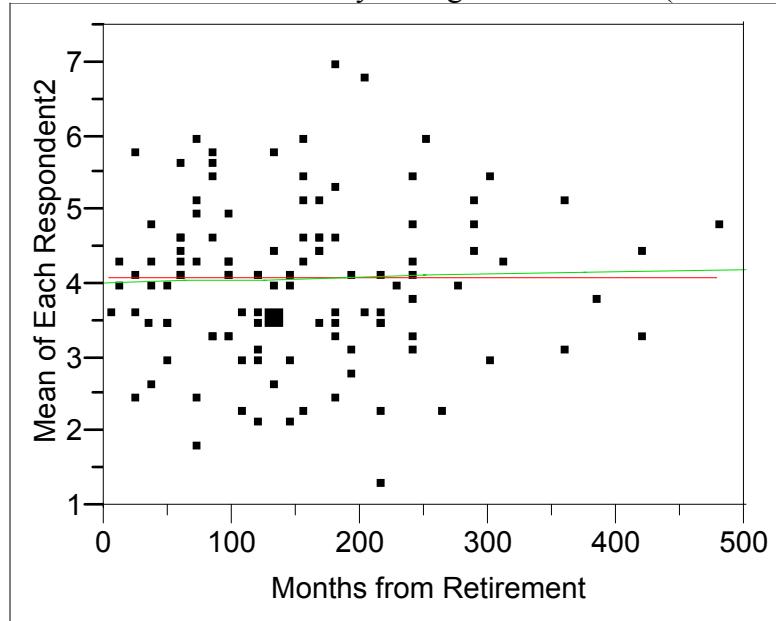
Months Worked at Current Job by Negative Affect



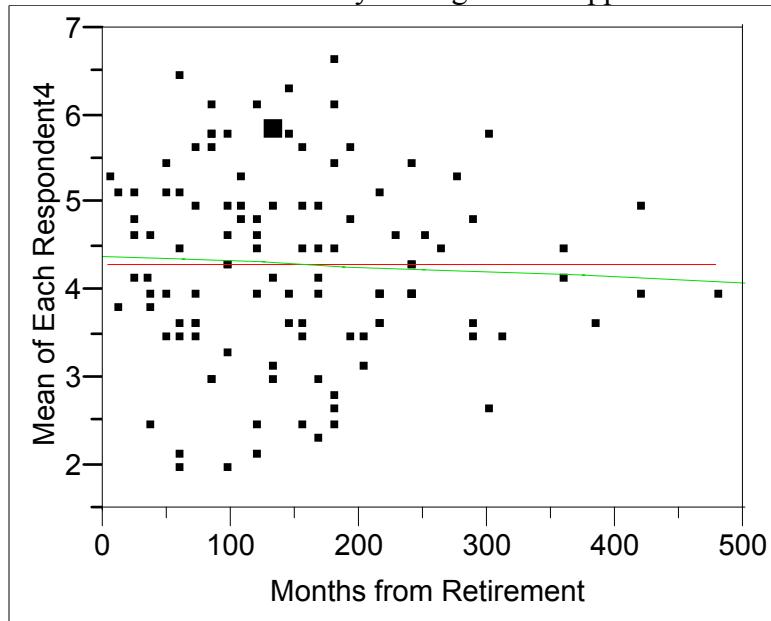
Months Until Retirement by Semantic Differential Scale



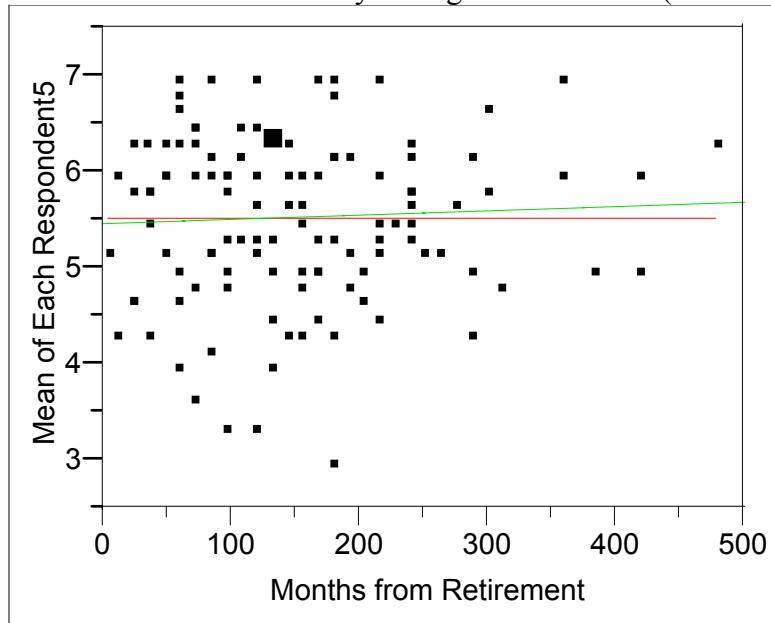
Months Until Retirement by Change Commitment (Continuance)



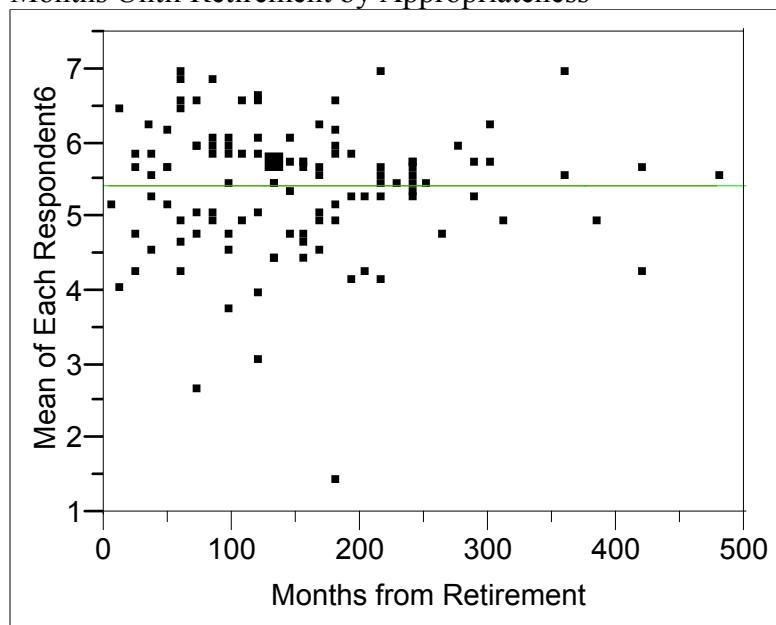
Months Until Retirement by Management Support



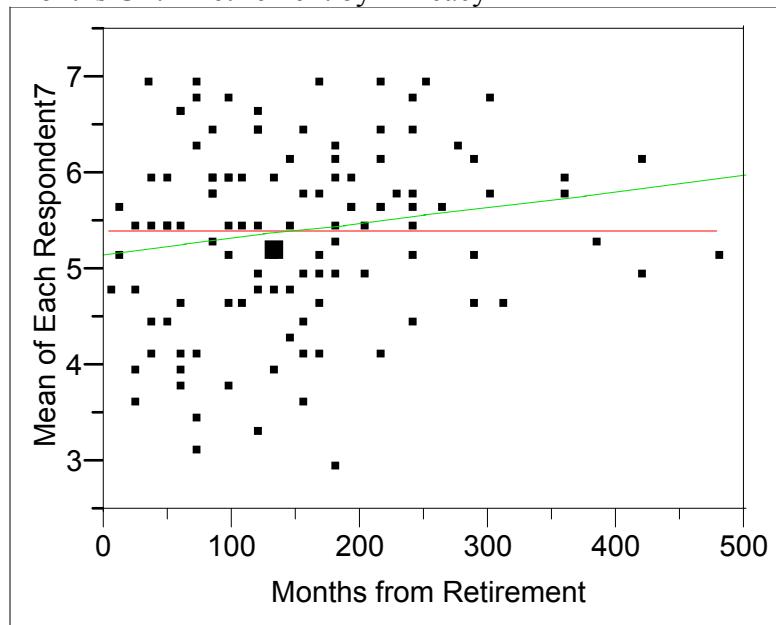
Months Until Retirement by Change Commitment (Affective)



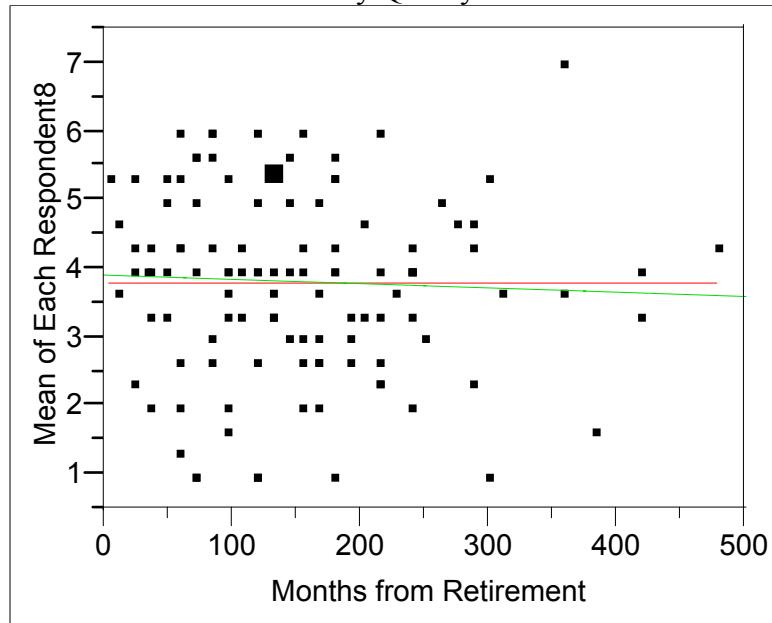
Months Until Retirement by Appropriateness



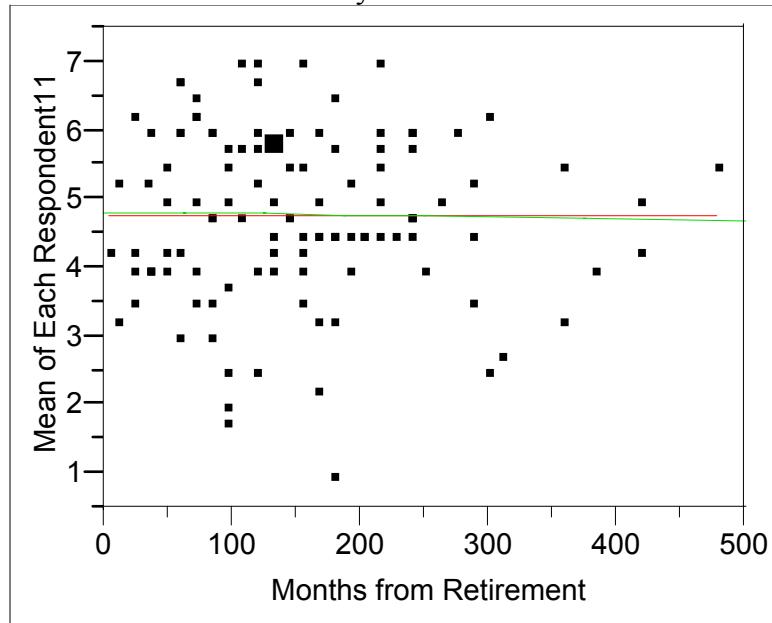
Months Until Retirement by Efficacy



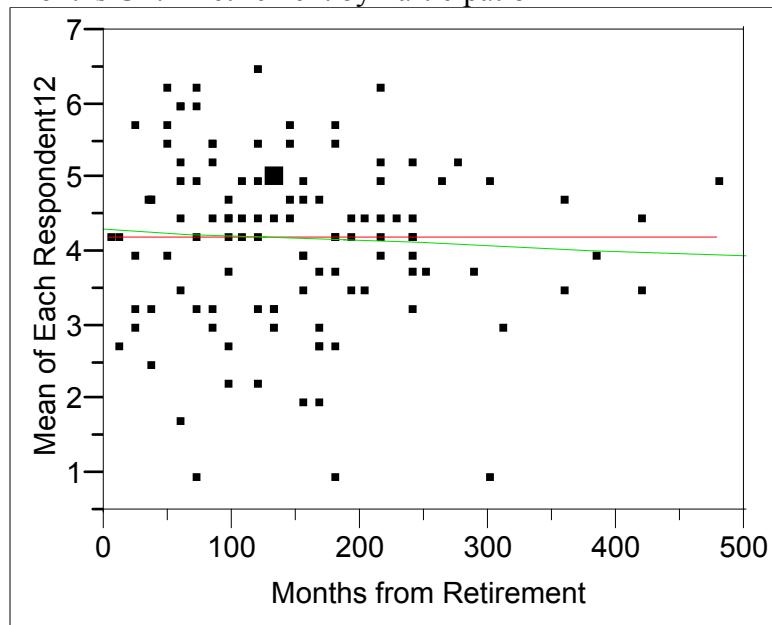
Months Until Retirement by Quality of Information



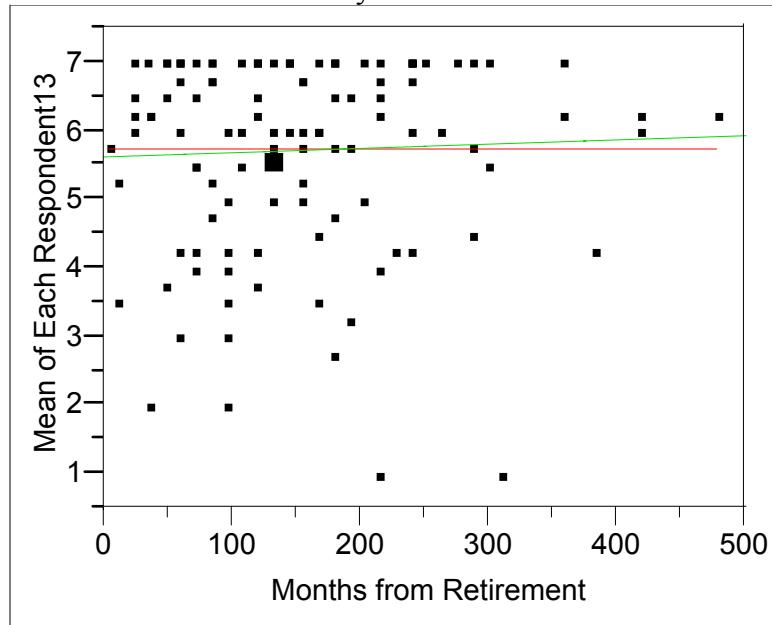
Months Until Retirement by Pessimism



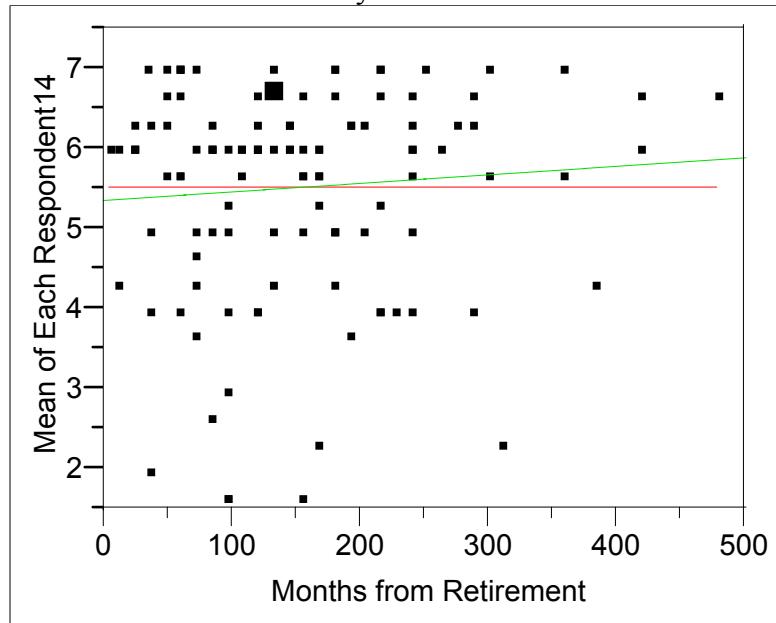
Months Until Retirement by Participation



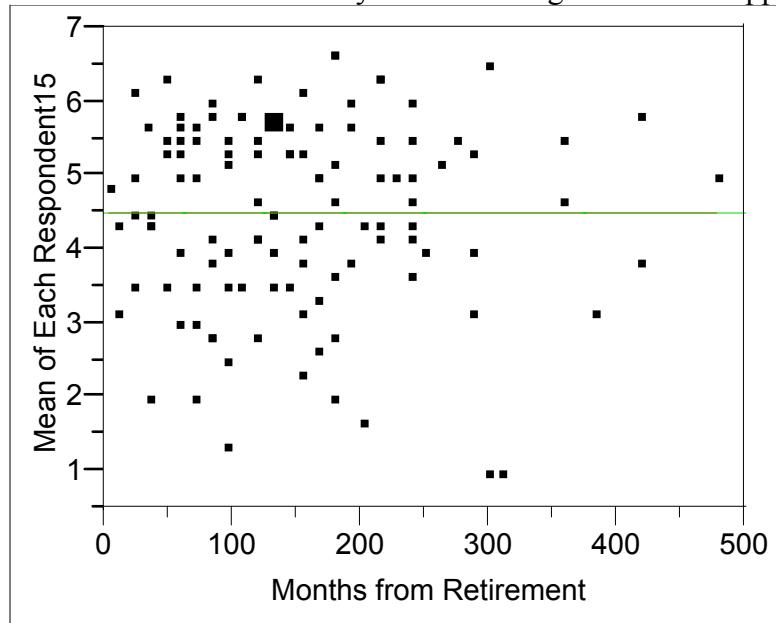
Months Until Retirement by Turnover Intention



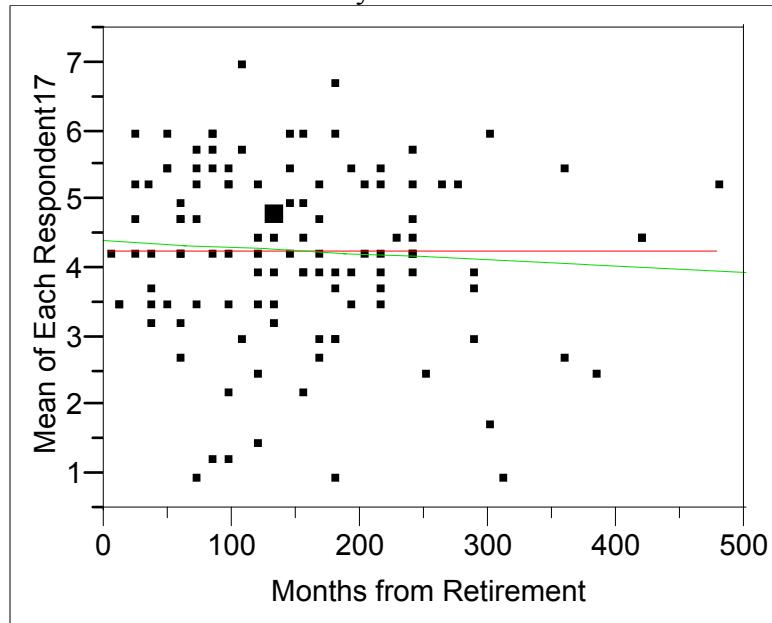
Months Until Retirement by Job Satisfaction



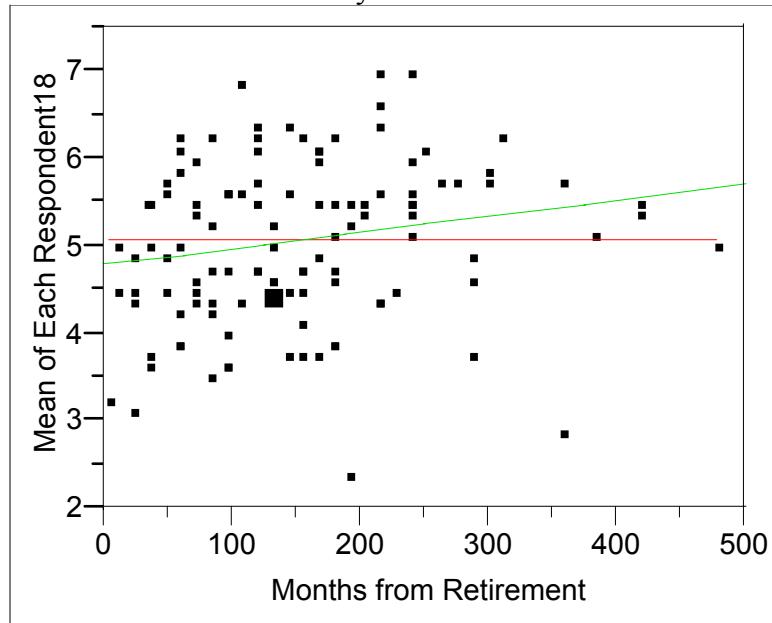
Months Until Retirement by Perceived Organizational Support



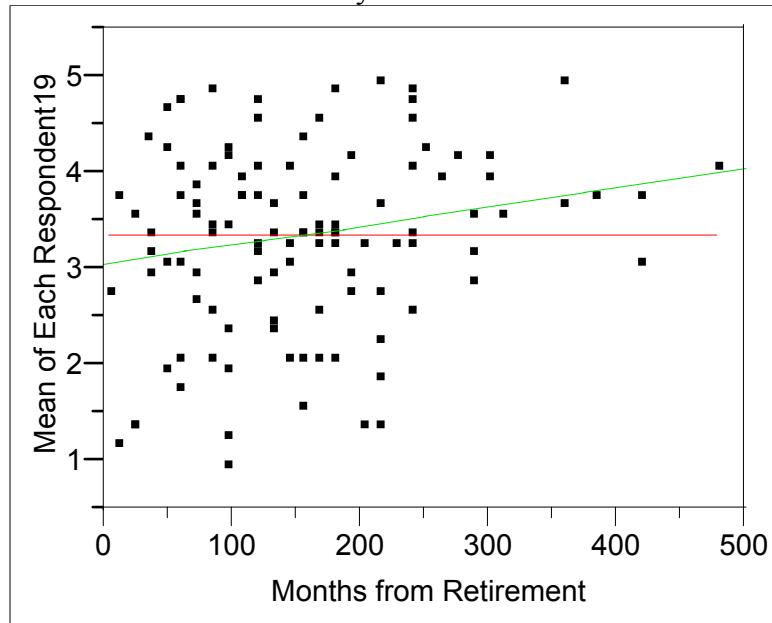
Months Until Retirement by Communication Climate



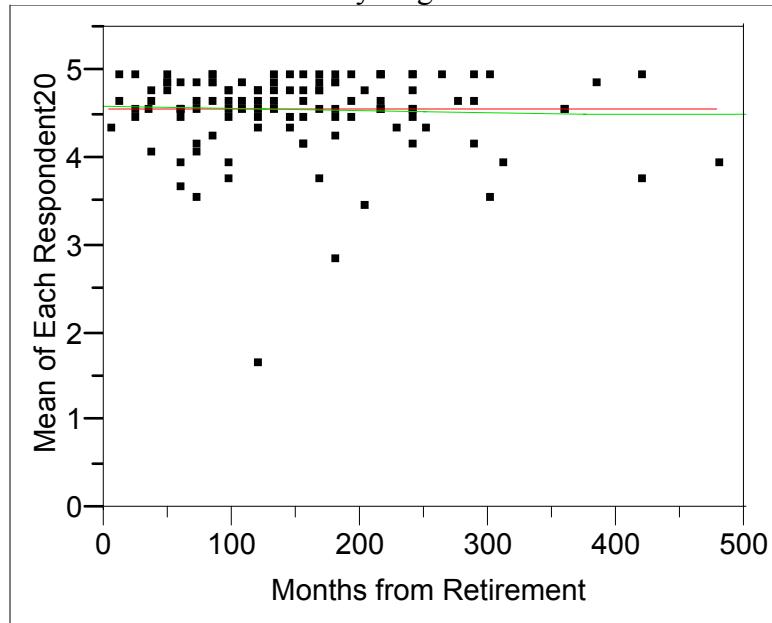
Months Until Retirement by Innovativeness



Months Until Retirement by Positive Affect



Months Until Retirement by Negative Affect



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## **Vita**

Mr. Martin Trent was born in Dayton, Ohio and later moved with his family to Mt. Vernon, Ohio. After graduating from Mt. Vernon High School, Mt. Vernon, Ohio in 1985, he attended college at Wittenberg University, Springfield, Ohio where he earned Bachelor's Degrees in Business Administration and Philosophy. Upon graduating in 1989, he accepted a position with the United States Air Force and entered the Copper Cap training program. Mr. Trent was assigned to several System Program Offices (SPOs) at Wright-Patterson AFB, Ohio as a contract negotiator and was warranted as a Contracting Officer in June 2000. Following a 10-year assignment with the C-17 Aircraft SPO, he entered the School of Engineering and Management, Air Force Institute of Technology, in August 2001.

## REPORT DOCUMENTATION PAGE

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<b>4. TITLE AND SUBTITLE</b>  <b>ASSESSING ORGANIZATION CULTURE READINESS FOR KNOWLEDGE MANAGEMENT IMPLEMENTATION: THE CASE OF AERONAUTICAL SYSTEMS CENTER DIRECTORATE OF CONTRACTING</b>			<b>5a. CONTRACT NUMBER</b>  <b>5b. GRANT NUMBER</b>  <b>5c. PROGRAM ELEMENT NUMBER</b>			
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<b>13. SUPPLEMENTARY NOTES</b>						
<b>14. ABSTRACT</b> <p>The DoD is currently pursuing a wholesale transformation that impacts all facets of DoD operations and responsibilities. Leveraging knowledge (intellectual capital) to increase efficiency and effectiveness within the organization has become a popular management technique that has been successful in many commercial firms. The DoD has noted the commercial sector successes and initiatives to better manage knowledge are being developed and implemented on an enterprise-wide basis as well as on a local-organizational basis. Previous research suggests that an organization's readiness for change is a critical factor in whether or not implementation of knowledge management projects is successful.</p> <p>This thesis focuses on measuring readiness for change within the Contracting Directorate at Aeronautical Systems Center (ASC/PK) located at Wright-Patterson AFB, Ohio and whether or not there are any demographic correlations to readiness for change within the organization. ASC/PK's readiness for change was measured using a cross-sectional survey methodology and the results suggest that the ASC/PK population is generally ready for change in regard to knowledge management initiatives; however, several areas have been highlighted for improvement to increase overall readiness. Furthermore, the results of the study do not suggest any demographic correlations.</p>						
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